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CASE STUDIES ON REDD+ AND CARBON RIGHTS

PROPERTY RIGHTS AND RESOURCE GOVERNANCE
PROJECT (PRRGP)

WORKING PAPER

SEPTEMBER 2011

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ACRONYMS AND ABBREVIATIONS

AA	Authorized Association
ANSAB	Asia Network for Sustainable Agriculture and Bioresources
BAL	Basic Agrarian Law
BPN	Indonesia National Land Agency
CAPRI	Collective Action and Property Rights
CBFM	Community-Based Forest Management
CEMDA	<i>El Centro Mexicano de Derecho Ambiental</i> (Mexican Center for Environmental Law)
CFUG	Community Forest User Group
CIFOR	Center for International Forestry Research
CONAFOR	<i>Comisión Nacional Forestal</i> (National Forestry Commission of Mexico)
CPN	Communist Party of Nepal
CTC	Consultative Group
DDC	District Development Committee
DFCC	District Forest Coordination Committee
DFO	District Forest Office
DoE	Division of Environment
DUAT	<i>Direito de Uso e Aproveitamento</i> (Right of Use and Benefit to Land)
EPIQ	Environmental Policy and Institutional Strengthening Indefinite Quantity
ERC	Ecosystem Restoration Concession
FAO	Food and Agriculture Organization of the United Nations
FBD	Forest and Beekeeping Division
FCPF	Forest Carbon Partnership Facility
FECOFUN	Federation of Community Forest Users, Nepal
FPIC	Free, Prior and Informed Consent
GHG	Greenhouse Gasses
GTZ-CBC	German Technical Assistance Community Based Conservation

IAFCP	Indonesia-Australia Forest Carbon Partnership
ICEL	Indonesian Center for Environmental Law
ICRAF	World Agroforestry Centre
IDP	Internally Displaced Person
IIED	International Institute for Environment and Development
ITC	<i>Iniciativa para Terras Comunitarias</i>
JFM	Joint Forest Management
JICA	Japan International Cooperation Agency
KCPF	Kalimantan Forest Carbon Partnership
LOI	Letter of Intent
LSGA	Local Self Government Act of 1998
MoFSC	Ministry of Forests and Soil Conservation
NEFIN	Nepal Federation of Indigenous Nationalities
NGO	Nongovernmental Organization
NORAD	North American Aerospace Defense Command
NTFP	Non-Timber Forest Product
PES	Payment for Environmental Services
PFM	Participatory Forest Management
PROCEDE	<i>Programa de Certificación de Derechos Ejidales (Program for Certification of Ejidal Rights)</i>
PSAH	Payment for Hydrological Services
REDD/REDD+	Reducing Emissions from Deforestation and Forest Degradation
R-PIN	Readiness Plan Idea Note
R-PP	Readiness Preparation Plan
RUPES	Reward for Use of and shared investment in Environmental Services
SAO	<i>Servicios Ambientales de Oaxaca</i>
SDC	Swiss Agency for Development and Cooperation
TAPHGO	Tanzania Pastoralist and Cattle Herder Organization
TFWG	Tanzania Forest Working Group
TSA	<i>Tribunal Superior (Superior Agrarian Tribunal)</i>
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change

USAID	United States Agency for International Development
VDC	Village Development Committee
VLFR	Village Land Forest Reserve
WMA	Wildlife Management Areas
WRI	World Resources Institute
WWF	World Wildlife Fund

INTRODUCTION

The Property Rights and Resource Governance Project rights study assesses experience to date with defining rights to receive benefits related to carbon at national levels, with the emphasis on benefits relating to forest carbon under REDD+. This collection of case studies develops countries, representing a range of approaches to defining carbon rights, assess whether each approach does or could result in effective resource governance and equitable benefit sharing at the national level. These form recommendations for each country, provide lessons for the framework carbon rights study. Field visits were performed in each of the following countries for one to two weeks between February and June 2011 and involved interviews with government officials, private sector actors, as well as stakeholders, particularly focusing on experience to date with project level REDD+ and payment for environmental services (PES) activities.

1.0 MEXICO

1.1 STUDY OVERVIEW

Field visit Darryl Vhugen of Landesa and Ruth Nogueron of WRI visited Mexico in 2011 to gather information for the case study. The study conducted interviews in Guadalajara, Mexico City, Oaxaca (including a visit to a REDD+ project site in Tlahuitoltepec community) and Chiapas (including a visit to El Ocote protected area) (Figure 1.1)

1.2 BACKGROUND

Sixty-six percent of Mexico's national territory is covered by forests (63.5 million hectares) and scrubland and other types of low vegetation (64.1 million hectares). Forests are distributed throughout the country. Rich in biodiversity, cloud forests and dry forest are the most endangered forest types in the country. Over 10 million hectares of Mexican forests are devoted to forest plantations, consisting primarily of softwood (USAID 2011) (Figure 1.2).

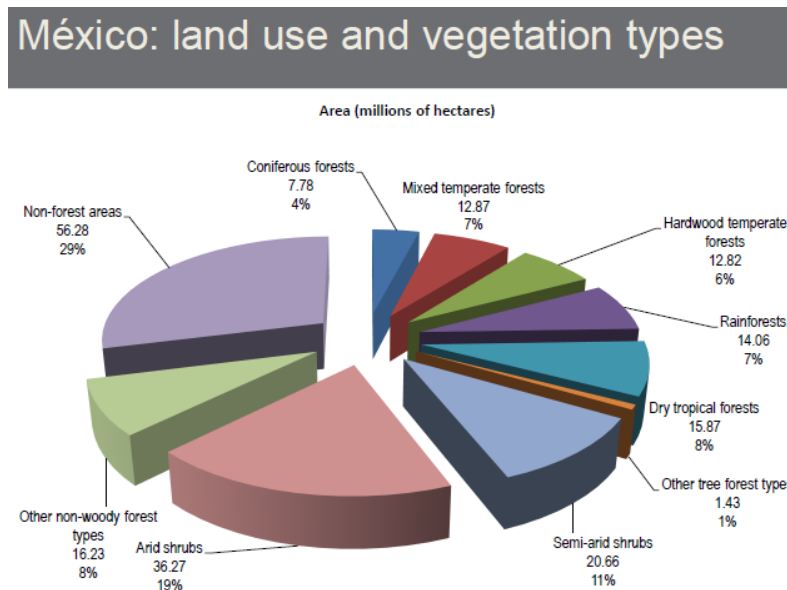
Forest communities in Mexico own most of the country's forests. However, they rely primarily on agriculture and livestock for local employment rather than the forest sector. Conversion of forestland for farming and livestock is the primary driver of deforestation. Though deforestation rates have decreased over the past few decades, forest degradation and deforestation continue at an annual rate of 0.4 percent. Forest fires, illegal logging, and the collection of fuel wood also contribute to deforestation.

Deforestation and degradation of forest resources is the second largest source of greenhouse gas (GHG) emissions and the sector has the potential to account for 38 percent of Mexico's emissions in the future (Mexico Readiness Preparation Proposal 2010).

FIGURE 1.1: MAP OF MEXICO AND LOCATIONS VISITED FOR REDD+ INTERVIEW



FIGURE 1.2: MEXICO LAND USE AND VEGETATION TYPES



1.2.1 LAND LAWS

Mexico's agrarian reform started in 1917 and caused profound changes in land distribution. Under the 1917 Mexican Constitution, property becomes private when the federal government, which has the primary ownership of all land, transmutes it to citizens or communities. Thus, from 1917 to 1992, the Government broke up large landholdings and redistributed approximately 100 million hectares of *ejidos* and *communes*, which are rural village collectives and indigenous communities that have communally held land. Through the years, the land distribution process varied according to changing legal, technical, and political forces. The economic role of *ejidos* also changed, from a source of additional income for communities working in

large farms in the 1920s, to one of the pillars of agricultural development, akin to the private agricultural sector, in 1992 (Blanco & Mojaró 2011).

By Presidential resolutions *ejidos* were created with members receiving usufruct use rights to individual parcels and communal lands. Until 1992 use rights were heavily regulated to disallow work their lands and transfer them to a sole heir; and prohibited with private parcels (Varela & Cruz 2011). Typically, individual families have use rights to the land for their house and a plot on which to while forestland held communally.

The following significant changes occurred by way of a constitutional amendment and new Agrarian Law adopted in 1992:

The reform legalized and encouraged the formation of joint ventures of communities and *ejidos* with private capital and an accompanying agrarian law provided the means for *ejidatarios* to become private owners and to rent and sell their land to third parties. These reforms also sought to legalize informal property rights and to stimulate rural investment by allowing *ejidatarios* to use their holdings as collateral for raising capital. forest commons, however, could not be subdivided in individual parcels and sold, thus remaining excluded from privatization (Cabrera et al., p3091 [emphasis added])

The 1992 reforms also introduced a land certification program called PROCEDA, which allowed 96 percent of agricultural households to register their land rights by 2005. Despite these reforms, very little land has been fully privatized to date, with only 1 percent of this land to *ejidatario* buyers (USAID 2011a). However, if only communal land, including forestland, is considered, PROCEDA has certified 78 *ejidos* and 49 percent of *comunas*. Communities with uncertified land have somewhat less secure tenure over (Robles 2011).

The principle land administration institutions are the Secretary of Agrarian Reform (Secretaría Agraria y Reforma, SRA) and the National Agrarian Registry (Registro Agrario Nacional, RAN). SRA helps to implement PROCEDA, oversees national land and administers government land takings. RAN is primarily responsible for land registration (USAID 2011a).

While the Mexican government has eminent domain powers, the power is exercised only in rare cases and requires reasonable compensation. Land over which is especially well protected from unreasonable government takings. Such takings are subject to clear rules requiring the government to conduct an appraisal and market value to justify the compensation (USAID 2011a).

Overall, Mexico differs from most developing countries in the sense that property rights over land and forests are secure and most of the land (estimates range between 53 and 80 percent) is owned by indigenous and agrarian communities (Benneker & McCool 2009).

1.2.2 FORESTLAND LAW

Nearly 60 percent of forestland in Mexico is owned communally by *municipalidades* (Mexico R-PP 2010). Tenure is unclear in about 2 million hectares of forestland (Cabrera 2010). Forest areas are owned privately or by the state.

The Law on Sustainable Forest Development (2002) primarily governs forest activity in Mexico. The law sets forth the requirements for obtaining authorization to use forest resources and also makes on all Mexicans, including the government, to conserve, protect, sustainably use and restore forests in the country. Other important laws affecting the forests include: the General Law on Ecological Equilibrium and Environmental Protection, which regulates biodiversity; the Wildlife Law, which governs the use of wildlife and plants in the forest; and the General Law on Sustainable Rural Development, which regulates rural development activities in or involving the forests (2004) Fonseca

Generally speaking, cutting and removing forest products are prohibited activities in the absence of a government-approved forest management plan or logging (Operación) Permits, generally issued for 1-year terms, are issued by the Secretariat of the Environment and Natural Resources (SEMARNAT) (Anta Fonseca 2004).

One of the objectives of ProArbol (Mexico's National Forestry Commission) is to support forestland holders in reforestation projects through environmental services intervention payments that are intended to cover the opportunity cost of dedicating their lands to activities other than agriculture. This provides a potential basis for REDD activities.

The Community Forestry Program (7 C B 5 : C F 3) and Forest Communities helped to create and strengthen community forestry institutions that have led to decreased pressure on the land. According to Benneker and McCall (2009), community forestry has been widely recognized to have contributed significantly to the management and conservation of communal forest areas in Mexico.

1.2.3 EJIDOS AND COMUNIDADES

There are two types of communal land tenure found in Mexico: *ejidos* are legal entities that have the right to govern themselves and define how they will use their land and establish the boundaries of such uses within the communal properties. To exercise this right, *ejidos* must develop internal regulations and register them with the Agrario National Agrarian Registry). The regulations should address the organizational structure of the community, the rules to admit new members to the community and the rules and criteria to decide on the use of the land.

Generally speaking, Mexican law imposes no restrictions on how these communities use and manage land. A significant exception is communally held forestland, exploitation of resources is restricted as explained above (Brown 2004).

As a result, communities have different institutions, governance mechanisms, and decision-making processes. There are, however, common organizational structures within the *ejidos*.

- ◀ The general assembly is the highest authority within a *ejido*. In the *ejido*, it includes all *ejidatarios*. Among other things, the assembly is responsible for articulating and modifying the regulation, admission of new members, distribution of economic resources and approval of contracts and agreements with external actors, and allocation of areas for different land uses.
- ◀ The *comisariado ejidal* (ejido's common goods commission) is in charge of representing and executing the agreements of the assembly. The members of the commission (at a minimum a president, secretary and treasurer with their substitutes) are appointed by the assembly. Among other things, the commission is also responsible for the management of the common goods of the *ejido* in accordance with the guidelines established by the assembly, and to ensure that the rights of *ejido* members of the community are respected.
- ◀ The enforcement council is responsible for the activities of the common goods commission to ensure that it fulfills its obligations and follows the regulations established by the assembly. The members of the council (a president, two secretaries with their substitutes) are appointed by the assembly.

In *comunidades* the land belongs to the community based on a Presidential Resolution or a resolution from the Tribunal Superior Agrario (Superior Agrarian Tribunal or TSA in Spanish). The land can be subdivided for

1 CONAFOR interview.

individual property. According to the Agrarian Law, all forests are to be managed as communal lands. *Comunidades* have the power to convert themselves to

In an *ejido*, the land also belongs to the community based on a Presidential Resolution or a TSA resolution but the land can be subdivided for the individual use of the household, usually the husband or father. *Ejidatarios* have rights to communal lands, but may also own individual parcels. *Ejidatarios* most forest land is communally owned, although individuals may own parcels up to 800 hectares for agroforestry such as coffee plantations. *Ejidatarios* usually held land can be sold within the *ejido* but not to outsiders unless the general assembly has expressly approved privatization of the individual parcel. (Robles 2011 USAID 2011a)

1.3 A 9 L = 7 C Ñ G ` 8 9 J 9 REDD+ STRATEGY

Mexico has not yet adopted its REDD+ strategy. In 2010, it adopted a plan for REDD which sets forth the following three general goals (Government of Mexico 2010)

1. In 2020 Mexico will have zero net emissions associated with land use change and, additionally, it will enhance existing carbon stocks, ensuring the maintenance of biodiversity and ecosystem integrity through actions such as sustainable forest management, conservation activities, and enhancement of carbon stocks.
2. By 2020, the national rate of forest degradation in Mexico will be reduced significantly compared to the reference level. Sustainable use of resources, as well as natural and induced regeneration, will spread. Uncontrolled fires will be effectively discouraged: improved prevention, combat and control of ecosystem disturbing agents will be implemented. Incentives for sustainable land use practices will be created. Also acknowledged is the need for stronger law enforcement, more effective environmental education and increased participation so as to promote the value of forests in support of efforts to eliminate illegal markets for wood, forest products and forest products.
3. By 2020 Mexico will have maintained its biodiversity, strengthened rural communities social capital and promoted economic development through sustainable rural development.

The government is in the process of preparing a REDD+ strategy. Several interviewees agreed that it is important that the strategy be completed and adopted before the June 2012 Presidential election. The strategy probably will be adopted prior to 2013 as the newly elected president will not take office until six months after the election and the outgoing president will be reluctant to adopt any significant new initiatives.

A consultative group (CTC) has been formed to prepare the REDD+ strategy. The CTC grew out of the original REDD+ working group that was formed to work with CONAFOR, the lead government agency for REDD+. The CTC now has more than 50 members. After preparing Mexico's NREPP, the group began working on the REDD+ Strategy in mid 2010. The group is comprised of representatives from virtually all relevant stakeholders with one glaring exception: groups are not represented. This issue is discussed more fully below. The wide disparity of perspectives represented in the CTC has slowed the process of developing a REDD+ strategy as has the lack of any approved international REDD+ regime.

Although the REDD+ strategy is very much a work in progress, several themes emerged during interviews and while reviewing literature that seem likely to find a place in the strategy:

² Interviews with Anthony Challenger of SEMARNAT and with Santiago Enríquez and Gabriela Lozada of ABT Associates (March 3

³ A Y I J W c ` j g ` U ` a Y a V Y f ` c Z ` h ` Y ` K c f ` X ` 6 U b _ N g ` : c f Y g h ` 7 U f V c b ` D U f h b Y f g ` \ ` d ` :

⁴ Interview with Juan Manuel Frausto Froya of *Foro Mexicano Para La Conservación de la Naturaleza*, A2011 (March 3

⁵ Challenger interview.

1. Some aspects of REDD+ systems are likely to be based on Mexico's current forest program, known as ProArbol. This approach relies on the country's existing system of Payment for Environmental Services (PES) for benefit distribution (Benneker & McCool 2009).
2. The approach will be based on sustainable community forestry, as suggested by several interviewees. This approach will emphasize giving forest communities the right to exploit forest resources so as to combat poverty sustainably manage the resources (Mexico RPP 2010). Thus, Mexico may not rely heavily on new or expanded protected areas that are established at least not without the agreement of communities, although one report states that the government is likely to establish REDD+ programs in perhaps 40% of existing protected areas (Ceballos 2011).
3. A REDD+ program is likely to be established within the broader context of community sustainable development. Most stakeholders recognize that REDD+ will not make a substantial contribution to poverty alleviation and that development in Mexico will not be tied to carbon. Rather, REDD+ is viewed as one of many development strategies.
4. Participation of forest communities in REDD+ has been and will continue to be voluntary (USAID 2011).

1.4 INSTITUTIONAL ARRANGEMENTS

Although REDD+ institutional arrangements have not yet been determined, it appears likely that CONAFOR will continue to be the lead institution at the national level. While no decision has been made as to whether or not REDD+ payments will flow through the federal government, via more decentralized paths or through a combination of the two, it seems that Mexico likely will adopt a nested approach. That is, key actors expect the federal government to monitor and account for emissions nationally while REDD+ activities are implemented at the national level by state or local governments, communities, private developers or NGOs.

At this point the federal government seems to want to bypass states in favor of working with local governments. But some states, such as Chiapas, are developing their own strategies and REDD+ activities for which they intend to receive benefits. They will try to do so within the parameters of the national strategy. It is not clear how this arrangement will function.

1.5 REDD+ BENEFIT DISTRIBUTION

The benefit distributed under the current CONAFOR PES system and the REDD+ projects included in this study is in the form of cash. We could not encounter any projects where benefits are offered in any other form, such as infrastructure improvements, land tenure rights or social capital.

⁶ Interview with Juan Carlos Carillo of CEMDA (Mexican Center for Environmental Data) (March 11 2011).

⁷ Challenger interview. However, one expert expresses that the government might use protected areas as one of the pillars of the REDD strategy, to the detriment of the communities located in those areas. Interview of Professor Leticia Merino Perez (March 3 2011).

⁸ E.g., Merino Perez interview.

⁹ Interview with several CONAFOR representatives, including Jose Maria Michel Fuentes, Patricia Magda Ponce Garcia Sanchez and Leticia Gutierrez Lora (March 2011).

¹⁰ Challenger interview: Enriquez and Lozada interview.

¹¹ Interview of Andres Callejas Linares, Undersecretary of Environment, State Government of Chiapas.

1.5.1 CONAFOR PES PROGRAM

It appears likely that existing CONAFOR PES program will be the predominant model for REDD+ benefit distribution. The most prominent PES program payments for hydrological services (PSAH)¹²

CONAFOR enters into 5 year contracts with landholders who participate in the program. Contracts are awarded to the applicants who score highest under a points system established by CONAFOR. Factors for which points are assigned include the risk of deforestation, existence of indigenous communities, participation of women, whether communities have good internal rules governing natural resource use, and other factors listed in the regulations. Contracting parties agree to make no land use changes and protect the land from illegal logging and forest fires so as to protect the water services provided by the forest on their land. Payments are made over the 5 year term. CONAFOR monitors performance periodically and by sending inspectors (Borsner & McCool 2009). At the end of the term it is the responsibility of the communities to find new buyers for the PES services.

Most of the contractor payments go to the community assembly (the governing body) must approve the terms of the contract with CONAFOR. The community decides how to spend the money based on its internal decision making practices.

Few communities have effective governance rules and the government is helping to update and improve their rules so they can receive points on their PES contract applications. They are trying to build capacity in the less skilled communities so that they can participate.

Thirty percent of the PES budget goes to communities in protected areas. The government has the power to impose protected areas on local communities even in the face of community opposition. CONAFOR (and others), this usually does not happen due to political factors. Communities have representatives on the advisory committee that manages the area.

1.5.2 SERVICIOS AMBIENTALES DE OAXACA (SAO) PROJECT¹⁷

SAO is an NGO based in Oaxaca that has helped to establish REDD+ projects in several communities in Oaxaca. The research team visited a community named Tlahuitoltepec, the site of such project.

The community initiated a PES project with CONAFOR several years ago. The project is managed by the community. The community reforested 75 hectares of land per year for 5 years. The land was degraded land where people had cut for firewood and agricultural crops.

The REDD+ project began after the end of the CONAFOR PES project. The project is managed within the community by an elected Agrarian Authority consisting of 10 members and 16 assistants. Tlahuitoltepec members are women, though there are eight female assistants. The Authority's duties include deciding how to spend REDD+ revenues and who will be paid to do reforestation work.

All forest land is communally held so there is no private land involved in the project. The people were cultivating on degraded land that was in the reforestation project, so they moved to other agricultural land to accommodate the project.

¹² A third program, payments for carbon sequestration, is dormant.

¹³ Comunidades are typically indigenous, are managed somewhat differently, and fall under different rules.

¹⁴ CONAFOR representatives interview.

¹⁵ Id.

¹⁶ Id.; Presentation by Roberto Escalante (CONANP director of El Ocote region) March 9, 2011.

¹⁷ Content in this section is derived from interviews with Tlahuitoltepec community Agrarian Authority and the SAO technician (March 2011); Carlos Marcelo Perez of SAO (March 2011) and Jose Antonio Benjamin Ordóñez of Pronatura (March 8, 2011).

SAO technicians assist the community to produce forestation activities, maintain the forest properly, and measure the amount of sequestered carbon. SAO interacts with Pronatura Mexicana, a Mexico-based conservation NGO which, among other things, solicits carbon payments from SAO, thereby assuming the role of a broker. Carbon funds flow through SAO and then to the community. Most of the costs of the SAO technicians are paid by contributions from donors to SAO, although SAO can receive up to \$1 of the carbon payment per ton.

The revenues are paid to the Agrarian Authority which spends the money on (1) the costs of the Agrarian Authority; (2) paying people to work in the forests, planting trees and providing security; and (3) community improvement projects. There is no apparent relationship between receipt of carbon revenues and land rights as benefits go to individuals in the form of wages for working on the plots. In other SAO projects land is owned by individual families. In those cases, the family receives a proportionate share of the carbon payment based on the size of their land holding.

Pronatura began to broker credit sales over the past 3 years. Carbonated payments from corporations and foundations in Mexico on behalf of SAO and the community. For example, Pronatura sold newly sequestered carbon from the reforested area to Fundación de la Charitable arm of the large Mexican media company. It entered into a 5-year written contract with SAO on behalf of the community, though they made a verbal commitment. Other buyers include Mexican companies, Samba and Chino. The price of carbon is \$10/ton from which SAO and Pronatura receive \$1/ton, while the international market price ranges from \$3 to \$5. Presumably, the buyers are willing to pay extra for the good project they elicit.

1.5.3 AMBIO PROJECTS IN CHIA PAS -SCOLEL ÑE AND EL OCOTE

Perhaps the best known Mexican REDD project operating in the state of Chiapas is the Cooperativa Ambio project in the state of Chiapas. Ambio is an NGO that designs and implements PES projects in southern Mexico (Cooperativa Ambio 2011).

The Scollel Ñe project involves the sale of Plan Vivo carbon credits. The current price is about \$3/ton. Landholders (in this case) receive 5 payments over 8 years in return for providing environmental services that increase carbon sequestration. Payments reflect the amount of additional carbon sequestered in the project area using the Plan Vivo carbon model. Since the project began in 1997, 395,704 tons of CO₂ equivalent have been offset. Lessons from the project formed the basis for much of the content of Mexico's REDD+ strategy.¹⁹

Ambio is working to establish another REDD project with the El Ocote Reserve area of Chiapas. They chose this site based on the suitability of the area, how well the communities are organized and their experience with CONAFOR PES projects. In the ejidos, they have simply divided CONAFOR PES revenues equally among members of the ejido (the *ásejidatari*). They have not invested the funds in community assets or shared revenues with them, though they are legally empowered to do so. Carbon revenues will have to be handled differently under a REDD+ project as some of the money will have to be invested in the system for monitoring, paying technicians and other project related expenses.²⁰

¹⁸ Interview of Elsa Esquivel of Ambio (2011); Cooperativa Ambio website. URL: http://www.ambio.org.mx/site/index.php?option=com_content&view=article&id=24&Itemid=44&lang=es (2011).

¹⁹ Enríques and Lozada interview.

²⁰ Esquivel interview.

1.6 ENTITLEMENT TO RECEIVE REDD+ BENEFITS UNDER MEXICAN LAW

Mexico has not adopted laws creating carbon rights or explicit entitlements to receive benefits under a REDD+ regime. However, existing rights to land and environmental services implicitly form the basis for an entitlement to receive such benefits. In this respect, the Mexican Constitution (Article 27) and the Forest Sustainable Development Law (Article 5) clearly state that landowners, including indigenous communities and individuals own the forest resources on the General Sustainable Forest Management Law (2003). The rights of indigenous communities to access the resources found on their native lands are also protected by Article 2 of the Mexican Constitution.

Mexico's Forest Sustainable Development Law and the General Wildlife Law both include carbon capture in the definition of environmental services. The definition of environmental services is specified in several parts of this legislation as accruing to landowners. For example, when referring to the promotion of environmental goods and services the Forest Sustainable Development Law says it should adequately compensate forestland owners for the services provided to society (Article 1334). When referring to the issuance of environmental goods and the laws states they will be created to compensate landowners for environmental services generated as a result of forest conservation (Article 42). Finally, when referring to the creation of the Mexican Forest Fund, the Law states that income to the fund deriving from environmental goods and services will be channeled to the service providers, with a percent subtracted to cover the costs of the fund (Article 143).

In light of these regulations it is safe to conclude that REDD+ carbon rights are likely to be considered a type of environmental service provided by forests and ecosystems. Benefits accrued would primarily go to the owners of such forests.

Because most forest land is communally owned and PES schemes have focused on it, it is reasonable to assume that REDD+ projects in Mexico will focus primarily on communal areas, just as the pilot projects do. As explained above, land and tree tenure in communally held areas, the control of *ejidos* and *comunidades* systems, is relatively secure and should not be undermined by REDD+ projects. That is, it seems unlikely that outside actors will be able to take advantage of insecure tenure to secure REDD+ benefits. This situation means that in protected areas the government will be especially careful not to undermine land rights.

In addition, REDD+ projects probably will not be established in areas where land tenure rights are uncertain. PES regulations in Mexico do not permit landowners to enter into PES contracts unless they have undisputed ownership or possession of the land (Corbera 2011). Thus, one can predict that REDD+ may not exacerbate existing land tenure disputes because projects probably will not be established in areas where conflicts exist. At the same time, there is no indication that REDD+ implementation will be used to resolve such disputes.

The 2011 CONAFOR ProArbol call for proposals requires potential beneficiaries to be of Mexican nationality and to provide legal title to substantiate their ownership or possession of the land. In the *ejidos* communities CONAFOR requires the prior resolution establishing the community and definitive boundary definitions, but it does not require certification by PROCEDER (Operations Rules for ProArbol 2011). This definition is an important one since PROCEDER certification as a requirement to apply for REDD+ could exclude a significant portion of communally held yet uncertified land, especially those held by indigenous communities.

²¹ Carillo interview; Robles4at 3

Potentially difficult issues may arise regarding how REDD+ benefits will be distributed within those communities with clear tenured leaders of the general assemblies (*comités de comunidad*) govern the allocation of land and resource rights in the community (*ejidatarios*) can vote in the assembly, and only those who could establish residency at the time of the community assembly (*ejidatarios*) without permission of the assembly (USAID 2011). Thus, in many areas, there are many *ejidatario* residents who are excluded from important community processes. Will they be similarly excluded from REDD+ benefits paid to the community for improvements in communally owned forests? The example of the El Ocoté area may provide some insight. Payments have been divided among *ejidatarios* and not shared with any other members of the community or invested in community improvements. We do not know if this caused conflict but clearly the potential exists.

Presumably, the REDD+ system will include a requirement that the community invest some of their REDD+ payments in project maintenance, as Ambio requires in its REDD+ projects. Community leaders may not be able to continue to pay all benefits directly. This situation will leave even fewer funds to share with *ejidatarios*.

If disputes arise within the communities over REDD+ benefits, it is important to understand how they will be resolved. The 1992 Agrarian Law created new courts (*Unitarios Agrarios*) to resolve rural land disputes. The system includes an appeals court dispute resolution mechanism. However, this system does not appear to be well suited to handle disputes within the community over the distribution of REDD+ benefits, especially where, as will usually be the case in communally owned forest land, the benefits are not tied to a particular plot of land. It is unlikely that this system will be able to intervene effectively. There is no other suitable alternative dispute resolution system in Mexico. The regular civil court system could fairly and efficiently resolve REDD+ benefit disputes.

1.7 SOCIAL AND ENVIRONMENTAL IMPACTS OF THE REDD+ SYSTEM ON FOREST-DEPENDENT COMMUNITIES

To some extent, it is too early to predict the social and environmental impacts of a REDD+ mechanism on forest-dependent communities. There is the potential that the distribution of REDD+ benefits could create conflict between *ejidatarios* and non-*ejidatarios* explained above, although this form of communal land tenure has been working for a century and its internal governance structures may be able to resolve when they arise. Another potential issue is that payment of REDD+ revenues will undermine the traditional willingness of community members to work voluntarily for the community. If a REDD+ project pays them to work in the forest will they continue to do other community work? Requirements that may be established within REDD+ schemes (benefits to support community development activities (i.e. sustaining schools, health centers or other institutions) may, in some cases, be a more suitable approach to benefits deriving from forest commons.

1.7.1 WOMEN

The impact of REDD+ on women is another serious concern. Women in Mexico were largely excluded from the land redistribution reforms and most land communities held by the PROCEDA program mostly certified land in the names of the male heads of household; there was no joint titling law called for *ejido* and *comunidad* in the sole name of the *ejidatarios* or *comunidad* (Brown 2004). Few women hold land use rights or have the right to vote in community assemblies.

²² The same is true of *comuneros* in *comunidades*.

²³ See Corbera, et al, at 322; Interview of Kevin McGlothlin, Team Leader, Economic Growth USAID Mexico City.

²⁴ Carillo interview; Enríques and Lozada interview.

²⁵ Callejas Linares interview.

usually are not at the meetings so they are not involved in community decisions. In the El Ocote area, for example, women attend the meetings but always sit in the back.

The status of women has improved in some areas, especially where NGOs are working. The SAO REDD+ project in Oaxaca appears to have made some marginal improvements in the lives of some women in the Ahuitoltepec community in two respects. First, there has been some progress in increasing the participation of women in community decision-making. Although they are not elected members of the Agrarian Authority, the opinions of the women serving as assistants are listened to and respected. Second, women are among those hired to do reforestation work, something that would not have happened of years ago.

In its PES contract award process, CONAFOR has attempted to encourage communities to begin to empower women. Communities in which women play a meaningful role in decision-making are more likely to receive a PES contract than those that do not.

Migration presents an additional and significant barrier for REDD+ implementation. Many rural communities tend to be populated mostly by women, children and old men because many of the young men have migrated to the cities or abroad in search of better employment opportunities. As a result, communities sometimes find it difficult to make decisions as the predominant male decision-makers are often away. In their absence the communities may not have the legal authority to enter into con-

Some of those interviewed expressed doubts that rural communities will be willing to make substantial changes to their social traditions in order to qualify for REDD+ funds. Communities currently qualify for CONAFOR PES contracts without having to make such changes, although, as indicated above, communities are somewhat more likely to receive such contracts if they can show increased participation of women. If communities already receive PES funds without allowing women to participate, will the women's empowerment measures as a condition of receiving REDD+ benefits?

REDD+ projects may not worsen the situation of women but there is no indication that the receipt of REDD+ revenues will improve their lives in the short to medium term. It will undoubtedly be necessary to include women's empowerment as a part of the overall process of capacity building that REDD+ implementation will require.

1.7.2 INDIGENOUS COMMUNITIES

Indigenous land tenure rights in Mexico, especially for indigenous communities that have formed *comunidades ejidales*, are relatively secure. Mexican law provides substantial protection to such rights (James and Williams, 2003). Between 53 and 80 percent of all land in Mexico is owned by indigenous agrarian communities (Benneker & McCauley, 2009). A REDD+ program is unlikely to pose a significant threat to such rights.

However, for the most part, indigenous communities are not participating in the process of developing national REDD+ strategies. Several interviewees stated that this is a significant problem and agreed that it is very important to find a way to include these communities in the process.

The drafters of Mexico's REDD+ strategy recognize the difficulty of including Mexico's highly diverse indigenous community in the REDD+ strategy development process (Mexico-PP 2010). Reviewers of the strategy remain critical, stating that the strategy fails to recognize the special needs, circumstances, and rights

²⁶ Country Profile at 19; Carillo interview; Enríques and Lozada interview; Esquivel interview.

²⁷ Rickards interview; Marcelo Perez interview.

²⁸ CONAFOR interviews.

²⁹ Merlino Perez interview.

³⁰ Enríques and Lozada interview; Rickards interview. It should be noted that one interviewee thought that it would be possible to have women's empowerment as a condition of receiving REDD+ funds. Cf. Linera's interview.

indigenous peoples, including their linguistic and cultural diversity, and does not have a clear strategy for consulting with indigenous peoples organizations? (U] a c 2 1 0) n ' Y h ' U ' "

Including indigenous communities in the development of REDD+ in Mexico is perhaps more difficult than in other countries for a number of reasons. First, there are no national organizations that are recognized as being broadly representative of such communities. Second, conflicts among indigenous communities make it difficult to bring them into the process as they are reluctant to work together. Third, some indigenous communities perceive REDD+ as being very political and thus something to avoid.

There was consensus among the interviewees and other commentators that participation of forest communities in REDD+ is and probably will continue to be voluntary. Government officials maintain that even new or expanded protected areas will not be imposed on communities that strongly oppose them. However, there is reason for some concern as to whether communities, especially indigenous whose populations are often less educated, will have the capacity to make informed decisions regarding whether to participate in REDD+ projects.

Interviewees also agreed that most forest communities currently lack the capacity to understand REDD+ and to participate in the program. Only 10-15 percent of these communities are successfully managing their forests. The State of Chiapas and NGOs such as Fondo Mexicano, SAO and Ambio are working to build the necessary capacity. Successful and AS projects demonstrate that communities can learn to successfully manage REDD+ projects and invest REDD+ revenues. However, the process is consuming and expensive. It is not clear whether REDD+ projects or complementary programs will include sufficient funding for the necessary capacity building to enable forest communities, especially the isolated and more indigenous communities, to participate successfully in REDD+.

1.8 WILL DISTRIBUTION OF REDD+ BENEFITS INCENTIVIZE THE DESIRED LAND USE BEHAVIOR CHANGES?

The primary driver of deforestation in Mexico is conversion of forests for pasture and agricultural crops (USAID 2011a; Benneker and McCall 2009). The fundamental causes of deforestation have been described by Ugalde (2007) as 1) the profound inequality that characterizes Mexican society and the disadvantaged position of forest communities in negotiations with local, state, and federal agencies as well as with the private sector as the ultimate buyer of their resources; and 2) the deep seated disagreement about the importance of protecting the environment and assuring its integrity for future generations while providing a reasonable livelihood basis for the present. (Ugalde 2007, p. 6)

Will the implementation of a REDD+ program cause those who engage in deforestation practices to use forest differently? There are four important factors to consider.

First, the R-PP expresses concern over ensuring that the flow of benefits to those who would otherwise engage in deforestation (Mexico R-PP 2010). Where the tenure situation is unclear, an estimated two million hectares, there is little or no chance to direct benefits to the right people (Cordero 2011). Thus, in implementing REDD+ Mexico may decide to avoid areas of unclear tenure, which means the loss of an opportunity to change land use in those areas (Cordero 2011). Even where the tenure situation is clear, it will

³¹ Enríques and Lozada interview; Challenger interview; Callejas Linares interview; Rickards interview; Frausto Leyva interview; Merino Pérez interview.

³² E.g., Challenger interview; Benneker and McCall 2009.

³³ CONAFOR interviews; CONANP interview. At least one community in the Lacandona area of Chiapas, however, claims otherwise. See, http://www.reddmonitor.org/2011/04/07/fedeth-chiapas-mexico/?utm_source=feedburner&utm_medium=email&utm_campaign=Feed%3A%28REDDMonitor%29 Accessed April 12, 2011.

³⁴ E.g., Enríques and Lozada interview; Rickards interview.

³⁵ Merino Pérez interview.

³⁶ Callejas Linares interview; Frausto Leyva interview; Carlos Pérez interview; Esquivel interview.

be necessary to ensure that rural (individuals or communities) are actively involved in developing the project and understand and support the project (Mexico R-PP 2010)

As indicated above, a great deal of time and money will be required to ensure that the communities have the knowledge and skills to decide whether and how to participate in REDD+. Clear who will provide the necessary technical assistance for this undertaking. Currently, CONAFOR provides outside technicians to communities with PES contracts. They are exploring the possibility of hiring and training technicians to live in the communities, an approach already adopted by SAO and Amfor. This capacity building process is provided by the central government, the international community and potentially from a payment for performance system of REDD+.

Second, the government and the CTC have yet to consider how to handle payments under REDD+ if the country fails to meet its targets. It is not clear who will bear the risk if individual communities comply with their agreements will they be denied benefits if the nation as a whole fails. This is a significant danger of a national system and highlights the need for buffers.

Third, it is unclear whether REDD+ will provide benefits that are adequate to compensate for the opportunity costs of alternative forest land uses while also financing development and administrative costs of the REDD+ system. Mexican government agricultural and cattle raising subsidies greatly exceed PES payments or potential REDD+ payments. Some anecdotal evidence suggests that current PES payments are not enough to incentivize conservation. Capacity building and administration will be very costly. In Mexico, as in many other countries, a significant issue is whether REDD+ revenues will ultimately be sufficient to pay for the costs of operating the system and to incentivize the desired behavior.

1.9 SUGGESTED CHANGES IN LAW AND PRACTICE

Mexico might consider several changes in law and practice in connection with its REDD+ program. CONAFOR currently enters into five-year contracts with communities to provide PES for logging. Terms will be required under REDD+. It is not clear whether logging is legally permitted to enter into contracts of up to 30 years. CONAFOR should consider significantly lengthening the terms of their PES agreements as a prelude to REDD+.

Second, under current law logging permits must be renewed annually. Forest management plans are usually only for one year term (Bisneker & McC2009). As REDD+ projects will require forestland use commitments of far longer durations, the government should consider changing the law to allow for and forest management plans of much greater duration. For REDD+ projects the government might consider an approach similar to provided by the Mexican General Wildlife Law, whereby wildlife management permits may simply and easily renew their permits rather than being required to submit a new application (Aguilar 2009).

Third, Mexico should seek opportunities to empower women in forest communities as part of its REDD+ capacity building and implementation. Because most REDD+ projects will probably be located in areas where forestland is usually owned, the key to improving the status of women in those areas is to find ways for women to participate meaningfully in community forestry. Strategies could include giving priority in placing REDD+ projects to communities that include REDD+ project management similar to CONAFOR's current practice in awarding PES contracts. Providing REDD+ technical assistance to communities and should be to work with communities to increase the

³⁷ CONAFOR interview; Enriques and Lozada interview; Rickards interview.

³⁸ Enriques and Lozada interview.

³⁹ CONAFOR interview.

⁴⁰ Note that the SAO pilot does not pay for itself, despite receiving a carbon price well in excess of the London market price (Ordoñez-Díaz interview).

⁴¹ Merino Perez interview.

involvement of women. Widespread male migration from forest communities may actually present an opportunity to persuade those communities to place more women in positions of authority to maintain community development in the absence of them. Finally, the CTC should seek to ensure that organizations representing women have greater participation in the development of the REDD+ strategy.

Fourth, anecdotal evidence suggests that NGOs are not fully informing communities of the potential of participating in REDD+ projects. For example, Ambio does not tell communities about REDD+ due to potential for fear of unduly raising expectations. They have only discussed the benefits of REDD+ including improved land practices and sustainable development. Similarly, SAO has not told the communities that carbon buyers have orally agreed to do. While taking steps to avoid unreasonable expectations is sensible, communities should have all the facts about actual and potential projects so they can make fully informed decisions. Also, providing complete information may give all members of the community a better chance to participate. Clear guidance for communication of project activities should be made available.

Fifth, Mexico should base its REDD+ system on its already sustainable community forestry program rather than on expanding protected areas that have the potential to displace forest dwellers and undermine livelihoods. Sustainably managed forests have the potential to sequester more carbon than protected forests in which trees cannot be harvested and can also be more effective in expanding forest cover (Barry et al. 2010). Community forestry is also more consistent with protecting existing community rights to forest lands and decision-making (Barry 2010).

At the same time, however, REDD+ programs can target communities residing in existing protected areas as a measure to enhance community livelihoods and contribute to poverty alleviation goals rather than undermine them. The government may establish REDD+ projects in 40 percent of protected areas. This approach may create an important opportunity, if the resident communities agree to participate on a fully informed, voluntary basis.

Sixth, the PROCEDE land certification process should be recharged with a renewed effort to certify communally owned lands (*ejidos* and *comunidades*). This effort should focus in particular on *ejidos*, less than half of which has been certified. Doing so will make it more likely that such lands included in a REDD+ system that is based on the CONAFOR PES process that requires clear land tenure as a condition of a PES contract.

Finally, Mexico should consider whether the country will try to use REDD+ as a vehicle for resolving land disputes in the 2 million hectares of forestland where land tenure is neither clear nor secure. As discussed above, there is some doubt over whether REDD+ revenues will be adequate to pay for administration costs and incentivize the desired behavior where tenure is not an issue. Accordingly, it seems even less likely that the system could pay for the additional costs of rights and property dispute resolution (Corbera 2011).

⁴² See Brown, J. (2004) *Ejidos and comunidades in Oaxaca, Mexico: Impact of the 1992 Reforms*. Seattle, Washington: Landesa.

MEXICO CASE STUDY ANNEX A: LIST OF INTERVIEWS

Type of organization	Organization Name	Contacts interviewed & Title
Government	CONAFOR	Jose Maria Michel Fuentes, Paula Bauche Peterson, Sofia Magdalena Garcia Sanchez; Leticia Gutierrez Lorandi
	SEMARNAT	Anthony Challenger
	CONANP Mexico City	Javier Medina
	CONANP	Roberto Escalante, Director of El Ocote Reserve
Local Government	State Government of Chiapas	Alejandro Callejas Linares , Undersecretary of Environment
Village Government	Technician, Servicios Ambientales de Oaxaca (SAO)	Alejandro
	Tlahuitoltepec community	Several members of the Agrarian Committee
	Ambio	Several community technicians
Universities and research institutions	UNAM	Professor Leticia Merino Perez
Local civil society	Fondo Mexicano Para La Conservacion de la Naturaleza, A.C.	Juan Manuel Frausto Leyva, Director Forest Conservation Program
	Servicios Ambientales de Oaxaca (SAO)	Carlos Marcelo Perez
	Pronatura	Jose Antonio Benjamin Ordoñez Ì Diaz
	Ambio	Elsa Esquivel
	CEMDA (Mexican Center for Environmental Law)	Juan Carlos Carillo, Attorney
	Red Mexicana de Organizaciones Campesinas Forestales	Gustavo Sanchez Valle, President
International Institutions	World Wildlife Fund Program Mexico	Jorge Rickards, Director of Conservation
Bilateral agencies	USAID Mexico	Kevin McGlothlin, Team Leader, Economic Growth and Environment, and Natural Resources Advisor, Salvador Sanchez Colon
International NGOs	Conservation International	Juan Carlos Franco Guillen, Climate Change Coordinator in Mexico
Private firms	ABT Associates	Santiago Enriques, Environmental Management Director, and Gabriela Lozada, Grants Manager

2.0 INDONESIA

2.1 STUDY OVERVIEW

Field visit: Darryl Hughes of Landesa and Crystal Davis of WRI visited Indonesia from January 10 to February 2011 to gather information for the case study. Crystal made a second visit from July 10 to August 18, 2011 to gather additional information. The team conducted interviews in Jakarta, Bogor and Bali. On her follow-up visit, Crystal went to Central Kalimantan Province where she met with the members of the Provincial REDD Working Group and visited a REDD pilot project in the Districts of Kotawaringin Timur and Katingan. She also visited a Reward for Use of and shared investment program (RUPES) Environmental Services (RES) project in the district of West Lampung.

2.2 BACKGROUND

About 49 percent of the land area is covered by forests, although the Ministry of Forestry (MoF) classifies approximately 70 percent of the country as forestland. Indonesia is the world's largest tropical rainforest ecosystem.

MoF distributed 1.2 million hectares of forests for mining concessions in 2009. In 2010, MoF doled out a further 1.2 million hectares. Over 5 million hectares of forestland has been converted to oil palm plantations since 2000.

FIGURE 2.1: MAP OF INDONESIA AND LOCATIONS VISITED FOR REDD+ INTERVIEWS



43 A complete list of interviews is attached as Annex A.

5 billion tons of carbon dioxide (CO₂) if released, would emit 100 billion tons of CO₂ into the atmosphere (Fegerty 2010).

Deforestation has been extremely high, at roughly 2 percent per year, the highest in the world in 2003. The primary drivers of deforestation in Indonesia, which vary somewhat across the geographic regions, are the demand for timber, illegal logging (and the very large palm oil industry) and mining. The majority of logging is illegal. Most of the minerals and metals for which there is demand are found in Indonesia. Indonesia is among the largest emitter of greenhouse gases and seventy percent of its emissions are caused by deforestation (SARD 2011b).

In 2009, the Indonesian government issued a moratorium on logging in connection with the Indonesia REDD+ Partnership (discussed below). The decree essentially bans new logging of primary forests and peat lands not already subject to concessions that have been finally approved or approved in principle. The extension of existing permits is also excluded from the ban. The decree has been criticized by many as overly favoring the palm oil industry. Consequently, any question whether it will result in any significant reduction in deforestation.

2.3 LAND LAWS

2.3.1 LAND LAWS

The complexity extends from the relationship between local communities, between both of them and local government and between national entities and local government (Galbraith 2010).

The BAL recognizes rights of ownership (hak milik) akin to permanent freehold, permanent use rights (hak pakai) a type of commercial agricultural lease (sewa usaha) and a right to build (guna bangunan).

The BAL recognizes, but contains only relatively weak protections for customary law of traditional communities, including those living in forested areas. Literally, the BAL applies to all land in the country. However, since adoption of the Basic Forestry Law in 1967, the BAL has not been applied to forest lands. This arrangement did not change with enactment of a new Forestry Law in 1999. The Forestry Law, together with the 1967 Law on Mining, prohibits customary land rights because the Ministry of Forestry has, in practice, refused to recognize customary rights (SARD 2011b).

Customary land law in Indonesia is very complex. Customary land rights and practices vary widely across the country. The BAL recognizes customary law as a primary source of land law but only if it does not conflict with other aspects of the BAL or the national law. It does not easily accommodate the variety of customary land practices. The law and the government provide only very weak recognition of customary land rights. Thus, forest dwellers with communal land practices have virtually no tenure security.

44 GYU @ U b [z ' 7 " ' fl & \$ % % E " ' = b X c b Y g] t b r i n g : T o o f i t Y e g t o x l a t e . R E D D m o n i t o r . o r g . A v a i l a b l e a t X Y W f Y Y ' c b ' Z c f <http://www.reddmonitor.org/2011/05/20/indonesiasignstheforestmoratoriumtoolittletoolate/>

45 Interview of William Sunderlin, Principal Scientist, Change Forests and Governance Programme, CIFOR, January 26, 2011.

By law, the National Land Agency (BPN) is responsible for determining the status of, allocating, registering and regulating all lands classified as forest although some of its authority has been devolved to provincial and district offices (SAID 2011). As explained below, however, BPN and the Ministry of Forestry (MoF) have clashed over authority to administer land that MoF claims for forest.

The Indonesian government has wide discretion to take land for public purposes, including private business activities. While the government is supposed to pay compensation for those land they take, the amount paid is generally low and is unavailable to individuals without documented land rights. This situation makes customary land rights, which are generally afforded very weak recognition, especially vulnerable to government taking (Costula & Mayer 2009).

2.3.2 FOREST LAW S

The Indonesian Constitution gives the state control of all natural resources although it does not specifically refer to forests. Although only about 10 percent of the land in Indonesia is formally titled in the name of the MoF, the MoF has claimed that up to 70 percent of the country is State Forest. The most important law governing forests and forestry is the Forestry Law 1999 which establishes categories of forest use as well as types of forest rights.

Categories of Forest Use

There are four categories of forest use under Indonesian law: (1) Forest Conversion Forests, forest areas that can be cleared for agriculture; (2) Protection Forests, forests with slopes above 45 percent that are intended to maintain watersheds; (3) Production Forests, areas where timber can be exploited either in limited production or full production. Areas under limited production have harvest restrictions, while the Production Forest can be fully exploited and cleared for tree plantation; (4) Conservation Forests, areas in which all of the contents of the forests are protected. The forest estate is divided into these four categories as follows:

TABLE 2.1 FOREST ESTATE CATEGORIES

Forest Category	Percentage of Forest Estate
Conversion Forest	11%
Protection Forest	28%
Production Forest	44%
Conservation Forest	17%
Total	100%

Forest Rights

There are two basic categories of forests rights: (1) Forests with Rights, which are on private land and cover about 10 percent of forested areas; (2) State Forests, which include all of the forest that is not Forests with Rights.

There are several categories of State Forest, including plantation forest, community forest (*kemasyarakatan*), village forest (*desa*), and adat forest (*adat*). Plantation forests are primarily for timber harvesting and can be operated from an industrial scale down to a small, community scale pursuant to the People Plantation (*tanaman rakyat*) tenure regime through which communities can engage in timber harvesting operations.

The Community Forest regime is a legal framework through which a local community group can access and exploit forest resources. Conservation Forest, Protection Forest, and Production Forest. A successful applicant receives a Community Forest utilization license that establishes the local community group as a

⁴⁶ Indrarto, Yetti interviews.

⁴⁷ Interview with Giorgio Budi Indrarto, Indonesian Center for Environmental Law (ICEL), January 2015.

cooperative and specifies the legal rights and responsibilities associated with the zone designated as Community Forest. The activities permitted, mandated, or prohibited in the Community Forest are detailed in the utilization license. In Conservation Forest, the license permits some access to and use of environmental services and the collection of non-timber forest products (NTFPs) such as rattan, bamboo, resin, tree bark, leaves, palm, sago, aloe, mangrove palm, and fruit. In Production Forest, the license also allows for timber utilization and collection (Government Regulation of Indonesia No. 6/2007).

The utilization license does not afford ownership rights to the forest zone and prohibits user groups from transferring or changing their status. The license also requires that Community Forest users prepare a business plan for the duration of their license (35 years), establish the boundaries of the licensed area and engage in sustainable forest management.

TABLE 2.2 CATEGORIES OF FOREST RIGHTS

Type of Forest/Rights	Characteristics of Land	Comments
Forests with Rights	Privately held land	Covers about 10% of all forested areas
State Forest		
Plantation Forest	Primarily for timber harvesting	Can operate at small/ community to large/ industrial scale
Ecosystem Restoration Concession	Developer restores forests in degraded state Production Forest; 100 year term	Might be used to participate in carbon market
Community Forest (<i>hutan kemasyarakatan</i>)	Local community group can form coop to exploit non-timber forest products resources in Conservation and Protection Forest, and timber resources in Production Forest	23 Community Forests formed in Indonesia covering only about 65,000 ha.
Village Forest (<i>hutan desa</i>)	Designation gives village forest management body the right to benefit from environmental services and NTFP from a demarcated area for renewable periods of up to 100 years. Area must be free of all other land claims	Only 1 formed in Indonesia
Adat Forest (<i>hutan adat</i>)	Designation supposed to enable <i>adat</i> communities to manage State Forest.	MoF has never issued implementing regulations so none formed.

Relatively few Community Forests have been established, due in part to the difficulty and high cost of establishing them. As of October 2010, MoF reported a total of 23 Community Forests in Indonesia. In some cases, Community Forest stewardship is limited by overlapping authority and poorly defined monitoring and evaluation criteria.

of forests under the Community Forest designation is the most advanced of the other community forest stewardship categories.

Village Forests were authorized by the Forestry Law of 1999, the MoF did not enact implementing regulations until 2007 to obtain village forest rights. A village must form a village forest management body. This body is responsible for managing the designated forest area in cooperation with the local MoF officer as well as other local and provincial officials. Village Forest designation gives the village the right to benefit from environmental services and NTFP from the designated area for a period of up to 100 years. They can receive permission to harvest timber under a separate process. The area must be free of all other land claims (Alisnawati et al. 2010 IFCA 2007).

To date, only one Village Forest has been established. It is located in Jambi Province, Sumatra and was certified in 2009. Setting up a Village Forest requires approvals at multiple levels of government, a process that is complex and time-consuming. Most officials and local communities know nothing about Village Forests or how to form them. In some quarters, the concept is controversial because it is a legal window through which to recognize community land rights, something rarely done in Indonesia.

In theory, the Adat Forest designation enables a community to manage State Forest. The MoF is supposed to issue implementing regulations but has not. Reportedly, there has been some limited recognition of Adat Forest by local governments but not at the central level. Generally speaking, there is a process by which adat communities can be registered and become eligible to have a recognized right to manage an area of the forest. However, this process is very difficult and time consuming.

Another important type of forest right is Ecosystem Restoration Concession (ERC). Under an ERC, a developer, often a conservation NGO agrees to restore degraded state Production Forest. The concessions are for 100 years during which time no timber may be cut. The goal is to restore forest on land.⁴⁹ ERC applicants do not appear to be required to consult with local residents of the proposed ERC area. U`h \ c i [\ `h \ Y m ` U f Y ` f Y e i] f Y X ` h c The first approved ERC was ` c W U ` ` W established by Burung Indonesia and Birdlife International in Jambi, Sumatra (Government of Indonesia 2008 Burung Indonesia 2008 Birdlife International 2010).

There are also commercially driven ERCs where a developer seeks to grow forests with the goal of entering the carbon market. The cost of forming an ERC is very high, equal to the cost of a commercial concession for the same area of land. Several partners are attempting to establish such a project in Rimba Raya, on the southern coast of Central Kalimantan province. Local communities in the area live adjacent to the restoration area but not inside it. The communities should benefit from improved water quality for their fishing industry. It is not clear how, if at all, the communities will share in carbon revenues if the project generates any.⁵⁰

C j Y f ` U d d] b [` 7 c b W Y g g] c b g ` U b X ` h \ Y ` B Y Y X ` Z c f ` Ĩ C b Y ` A U d 5 ` a c g h ` U ` ` ` c Z ` = b X c b Y g] U Ñ g ` Z c f Y g h ` U b X ` \ U g ` W c b W Y g g] also a small number of community and ecosystem restoration concessions. In some cases more than one commercial concession has been awarded for the same area. In other matters worse, concessions are often granted on land that is the subject of longstanding claims. In some cases, community opposition has

⁴⁸ Interview with Ujjwal Pradhan, Regional Coordinator, and Beria Leimona, Associate Research Officer, World Agroforestry Centre, Bogor, Indonesia. See also: ASB Partnership for the Tropical Forest Margins Policy brief 18. Nairobi 2010. Available online. URL: http://www.asb.cgiar.org/webdocs/ASB_18.pdf

⁴⁹ Interview of Taufiq Alimi, National Coordinator, Indonesia, Clinton Climate Initiative, January 2012.

⁵⁰ Alimi interview: As \ U a z ` 6 Y h \ " ` Ĩ F 9 8 8 ` D ` ` c h ` D f c ^ Y W h g 2 0 1 0. Available online. URL: <http://www.ecosmagazine.com/?paper=EC10048>

caused failure of commercial operations. Kuntoro Mangkusubroto, Director of the Delivery Unit for Development Monitoring and Oversight and the REDD Task Force, has concisely acknowledged the problem with an example from Central Kalimantan:

There are overlaps of licenses with the Forest Estate in Central Kalimantan. Four million hectares of Forest Estate, or 25% of the province has overlapping land use certificates that are in process or have been issued. Some 3.1 million hectares of Forest Estate has overlapping regional government permits, with 560,000 hectares that also have licenses from Ministry of Forestry top of its regional permit (Mangkusubroto 2011).

One of the causes of the overlapping concessions and unclear land forestland tenure generally is that the National Land Agency (BPN) do not use the same map to determine forestland ownership and use rights. The two agencies have failed in their attempts to harmonize their maps despite a mandate that they do. Although only about 10 percent of the land in Indonesia is formally titled in the name of the MoF, the MoF has claimed that up to 70 percent of the country is State Forest. There has been an unwritten agreement between BPN and MoF that the BAL does not apply to the 70 percent, although the BAL is supposed to govern land registration and titling of all land in Indonesia.

The government says it is committed to resolving these problems by taking two steps. create

This One Map will be the one and only map used by all ministries and government institutions as the basis for decision making. This integrated map should have robust definition and apply latest methods and techniques to identify the position and size of our forests, walls, across Indonesia. Stakeholders, including indigenous communities, will be encouraged to provide input through a transparent and participative process.

The second step will be to clarify rights to all of the Forest Estate:

Second, we must accelerate the enactment of Forest Law based on participatory mapping. Most Forest Estate is still in the designation phase, and only 14.2 million hectares or 12% has been enacted until now. Enactment of Forest Estate will identify private rights and it should be done in the registry of customary land. Forestland use can only be done after enactment to guarantee customary rights are recognized.⁵⁵

It is, of course, too soon to know whether these ambitious and important objectives will be achieved.

2.4 INDONESIA'S REDD+ STRATEGY

Although there has been a great deal of activity, Indonesia has not yet decided how to implement REDD+ a comprehensive way. The government has published a draft strategy document with ambitious goals, including reducing emissions by 26 percent from business as usual by 2020 using domestic resources, and by 41 percent with the support of the international community.

⁵¹ Sunderlin, Indrarto interviews; interview with Claussen, Managing Partner, Starling Resources, January 13; interview of Y.I Ketut Deddy Muliastira, Forest Governance and Mapping Specialist, Sekala, January 31.

⁵² Indrarto, Yetti interviews.

⁵³ Rhee, Fay interviews.

⁵⁴ Kuntoro speech.

⁵⁵ Id.

⁵⁶ Rhee, Yetti interviews; Interview with Andrew Wardell, Programme Director, Forests and Governance, CIOR; Government of Indonesia MoF. National Strategy: REDD Indonesia: Readiness Phase 2009 and Progress in Implementation February 2010.

Indonesia also participated in the UNREDD Programme (Forest Carbon Partnership 2011)

In 2009, Indonesia formed a National REDD Working Group under the auspices of the MoF. The government also established a National Council for Climate Change in the Forests (Angelsen 2009). More recently, the government created a Presidential REDD Task Force to the Norway Indonesia REDD+ Partnership led by Kuntoro Mangkusubroto, the Task Force has many key and difficult responsibilities, among them: (1) bridging policy differences between the MoF, Ministries of Finance and Environment and the BPN; (2) inducing the creation of a REDD+ agency to take charge of implementing REDD+ in Indonesia.

The Norway Indonesia strategy in May 2010, the two countries signed a Letter of Intent (LOI) setting forth the basic terms of the agreement to cooperate in the development of REDD+ in Indonesia. In the LOI, Norway agreed to provide \$1 billion in funding, payable over eight years upon fulfillment of various milestones. A second payment was to support development of the REDD+ strategy. The second payment will be used to support adoption of the forestry moratorium and the formation of two key institutions, one to administer the REDD+ program and one to monitor emissions. Thereafter, most payments are tied to verified emissions reductions. Central Kalimantan was selected as the pilot under the LOI (Letter of Intent 2010 Norway Indonesia REDD+ 2010).

The measures to address land tenure conflicts and compensation W` U] a g Å Z f c a` Y U Letter of Intent (LOI) (2010). This provision appears to signify that both governments believe \ insecure land tenure gives indigenous peoples and local communities little incentive to contribute to sustainable management of forest, especially when concessions for mining logging, pulp and paper or palm oil plantations are awarded on land inhabited and used by indigenous peoples and local communities without recognition of traditional rights and without compensation (Norway Indonesia REDD+ 2010).

Indonesia is also receiving major support on its REDD+ climate change efforts from Australia under the Indonesia Australia Forest Carbon Partnership (IAFCP) partnership includes the \$30 million Kalimantan Forests and Climate Partnership, which is a REDD project in a degraded peat swamp in Central Kalimantan province on the former Mega Area. The second pilot project under IAFCP is likely to be on Sumatra. USAID is active in Indonesia as well through the \$40 million Indonesia Forestry and Climate Services Project which will work on forest carbon issues in eight diverse landscapes across the country.

2.5 ENTITLEMENT TO RECEIVE REDD+ BENEFITS UNDER INDONESIAN LAW

2.5.1 REDD + REGULATIONS

In 2008 and 2009 Indonesia issued comprehensive REDD regulations governing REDD demonstration and the first commercial projects (Ministry of Forestry Decree 2009). These regulations \ U j Y` V Y Y b` X Y g W f] V Y X` U g` h \ Y` Î k c f` X Ñ g` Z] f+ projects, U h] c b U

57 Interview with Alfred Nakatsuma, Aurelia Micko, Carey Yeager, Tony Djogo, Ben Stoner, Bill Rush, USAID Jakarta and Alimi interview

58 Interview of Timothy Jessup, Forest and Climate Specialist, Indonesia Australia Forest Carbon Partnership, 2011

and the issuance and trading of carbon credits in respect of the geographically discrete projects (Wilder et al. 2009)

The first regulation establishes permission and approval procedures for REDD demonstration activities. The first regulation also covers forest management that endeavor to reduce carbon emission through forestation and degradation (Government of Indonesia 2008, Reg. ChII, Article 2)

The second regulation establishes procedures and requirements that REDD operators must comply with, including verification and certification, types of forest areas where projects can be established and standards and requirements to be met by the project. The decree authorizes demonstration activities and voluntary carbon trading prior to final determination of an international REDD. Various categories of forest rights holders expressly receive an entitlement to participate in REDD in partnership with an international entity. Rather than address revenue sharing, the decree explicitly defers the issue to a regulation to be adopted (Government of Indonesia 2009, Articles 20(1) and 22(1))

The third decree sets forth procedures for licensing commercial carbon sequestration projects in Protected Forests. It defines specific carbon sequestration activities. The regulation also covers approvals for those with and without existing licenses for various forestland uses, including environmental services, ecosystem restoration services and timber production in different types of forest. The decree includes required benefit sharing allocation percentages for each forest rights category (Government of Indonesia 2009a, paragraph 3 and Attachment III)

All in all, the decrees establish an approval process and governing rules for projects in different types of forestland categories. Indonesian entities or individuals already holding legal rights to those lands are given the right to collaborate with international entities to develop REDD. The regulation does not address purposes of payments or assignment of rights nor do they contain a requirement that a developer collaborate with a local community, let alone obtain their consent.

2.5.2 REDD + REGULATIONS UNDER LAND AND FOREST LAWS

For those who have secure rights to forestland, REDD projects will be located, the regulations appear to create a legal entitlement to receive REDD derived from those projects. However, rights to use forest resources in Indonesia are often highly contested so it is unclear how many will actually qualify. Certainly one can predict with a high level of confidence that local communities and indigenous people are unlikely to be among them. International Union for the Conservation of Nature (IUCN) 2009 since the regulation does not address the issue of land rights. Under the regulation, forestland that is not subject to an established land right is not eligible for a REDD project (Wilder et al. 2009). Thus, the decrees would appear to have little effect in the absence of clear underlying rights to forestland and resources.

The Indonesian government recognized the problem of land tenure conflicts in the LOI with Norway (Indonesia 2010). However, there is no indication as to what Indonesia intends to do to resolve this complex, longstanding problem. The REDD+ regulations do nothing to clarify the underlying problems of lack of tenure clarity, especially on behalf of local and indigenous communities.

⁵⁹ Interestingly, none of the individuals interviewed during the field study cited these regulations as creating carbon rights.

Several of those interviewed in the field study suggested that the Village Forests mechanism could be a successful vehicle for providing more secure rights to forestland to local communities. For several reasons, it is difficult to discern how this is workable in the near term. First, Village Forests are very difficult to establish, as evidenced by the fact that there is only one in the entire Village Forest country. Forest can only be established in an area that is entirely free of all other claims. Because of overlapping concessions and land claims this requirement will likely be difficult to satisfy in most cases. Third, the areas covered by Village Forests are likely to be small, which could mean that REDD+ transaction costs are too high. Finally, there is little political support for this mechanism.

Community Forests are another option and districts are considering this mechanism. Similar to Village Forests, however, the forest areas covered by community forests may be too small to attract government support due to the high costs of forming and administering them as a system. Finding forestland that is free of any other claims will be difficult.

Overall, Indonesia combines unclear land and forest tenure with laws that do not conclusively establish the rights and duties of the various levels of government for forest management (Takacs 2009). Indigenous communities and local governments have no obvious legal entitlement to forest resources and would form a basis for an entitlement to REDD+ benefits under the rather unclear provisions contained in the REDD+ regulations. The Ministry of Forestry sets the following guidelines for benefit sharing (Takacs 2009):

2.6 REDD+ BENEFIT DISTRIBUTION

Indonesia has yet to settle upon an overall national REDD+ benefit distribution and there is no national vision of how benefit sharing will unfold.

The REDD+ regulations may provide a clue as to how Indonesia will proceed, although reports from the Ministry of Forestry sets the following guidelines for benefit sharing (Takacs 2009):

TABLE 2.3: REDD+ BENEFIT DISTRIBUTION

Permit Holder	Government %	Community %	Developer%
IUPHHK-HA (Wood Use License For Natural Forest)	20	20	60
IUPHHK-HT (Wood Use License for Plantation Forest)	20	20	60
IUPHHK-RE (Wood Use License for Ecosystem Restoration Area)	20	20	60
IUPHHK-HTR (Wood Use License for D Y c d` Y Plantation Forest)	20	50	30
Community Forest	10	70	20
Hutan Kemasyarakata	20	50	30

⁶⁰ Rhee, Fay, Yetti and Jessup interviews.

⁶¹ Sunderlin interview.

⁶² Sunderlin interview; Leimona and Pradawante.

⁶³ Interview of Grotz Martin, McKinsey & Company, Jakarta, February 1

⁶⁴ Wardell interview.

⁶⁵ (Government of Indonesia 2009a, Attachment III.

⁶⁶ 5 j U] ` U V ` Y ` f Y g] X Y b h N g ` c Z - h r W y allocation (Kham 2010) (YAW 2009)] X Y f] b [` they are listed separately and entail different benefit allocations.

Permit Holder	Government %	Community %	Developer%
Adat Forest	10	70	20
Village Forest	20	50	30
KPH (Forest Management Unit)	30	20	50
KHDTK (Special Purpose Forest Area)	50	20	30
Protection Forest	50	20	30

Permit holders have rights over various types of forest areas on which REDD+ projects can be located. The central government is to receive 40 percent of the benefits, which changes from 50 percent depending on the category of permit holder with the remainder divided equally among the provincial and local government (Ministry of Forestry Decree 2009).

Generally speaking, the pilot projects do not appear to be contemplating payments to the usual suspects. Rather, they are likely to share benefits in the form of payments to communities or in the form of funding to build schools, clinics or infrastructure (Askhani 2010).

2.6.1 KALIMANTAN FOREST CARBON PARTNERSHIP (KFCP) PILOT

One of the most prominent pilots is the project implemented by the Kalimantan Forest Carbon Partnership (KFCP) in Central Kalimantan. It is located on a 120,000 hectare swathe of peat swamp forest and degraded peat land in an area known as the Rice Area. The project aims to preserve vast quantities of carbon stored in the peat soil and forests and reduce emissions by keeping water levels swamp high enough to keep the peat wet (which prevents carbon leakage from fires) and maintain the existing forest. The area is now a Protection Forest but will be converted to a Conservation Forest (Australia Indonesia Partnership 2010).

Project developers are working with communities that live on the borders of the site. In the initial phase, the emphasis is on a livelihoods program that is trying to improve rubber farming productivity and revenue. They also plan to provide payments for project work, such as reforestation to keep the soil moist. Ultimately, project planners hope to be able to make payments linked to measurable emissions reduction. They will explore the possibility of converting the area to Community Forest (Australia Indonesia Partnership 2010).

The KFCP project is attempting to support the development of institutions that can efficiently and effectively manage and distribute benefits. They are using village facilitators to work with local communities. The facilitators explain activities, oversee trainers and help to set up community leadership groups to represent the communities and manage them. KFCP wants the communities to make their own decisions about how to expend REDD+.

The KFCP project is controversial. It has been challenged on technical grounds and criticized for not obtaining the consent of indigenous peoples. Some maintain that the developers have raised community expectations of benefits unreasonably high (Lang 2011; Lang 2010; Bernadinus interview).

Benefit-sharing lessons and implications from two other projects visited by the team are described in the companion case study on benefit distribution in REDD+ activities.

⁶⁷ Jessup interview.

2.7 SOCIAL AND ENVIRONMENTAL IMPACTS ON FOREST-DEPENDENT COMMUNITIES

It is too early to predict the social and environmental impacts of REDD+ on forest-dependent communities. However, there are some concerns that REDD+ could increase opportunities for corruption and reverse recent efforts to control over natural resources (Neilson 2010).

As explained above, the land rights of indigenous peoples are typically unrecognized in Indonesia. These are claims that indigenous people have been consulted or given the opportunity to reject pilot projects to be situated on forestland where they live and they assert land rights. Some organizations such as Ujuz expressed concern that REDD+ could further marginalize forest people and those with customary rights. Large land acquisition remains a threat to smallholders with no formal legality (Angelsen 2009; see also Neilson 2010). These are very real concerns.

The impact of REDD+ on women is similarly uncertain. The strength of women's rights varies across Indonesia. On Java, for example, a significant percentage of land titles are in the name of women. Whether women have customary land rights depends on the local context (USAID 2011b). In many cases, women in forested communities tend to have little authority in the household. Women have not participated meaningfully in REDD+ consultations in Indonesia. Few women, especially indigenous women, are involved in REDD+ design or implementation (Liang 2011c).

As in other countries, there are also significant threats of corruption and capture of benefits by local officials. Local control over forests is not automatically a panacea that leads to sustainable forest carbon investments. Local control does not necessarily mean that local officials are more democratically accountable to local people, are less likely to have the resources or experience to perform their duties, or are more likely to be influenced by external actors with regard to forest exploitation (Tilac 2009).

2.8 WILL DISTRIBUTION OF REDD+ BENEFITS INCENTIVIZE THE DESIRED LAND USE BEHAVIOR?

It is difficult to predict whether REDD+ benefits will be sufficient to incentivize substantial changes in land use in Indonesia. The enormous revenues generated by the pulp and paper and palm oil industries in Indonesia suggest huge opportunity costs for large scale implementation. The \$1 billion that the government will receive from Norway pales in comparison to annual government revenues from palm pulp and paper and mining concessions. It is not immediately obvious that REDD+ benefits will be enough to combat the primary drivers of deforestation: demand for timber, illegal logging, land conversion and mining that are so economically valuable.

Perhaps more fundamentally, most of the most forested areas are already burdened by concessions where the government has sold the right to engage in various economic activities. There is not sufficient forestland remaining without concessions to achieve the level of emissions reductions that the government and the international community demand. REDD+ revenues will have to be large enough to incentivize the existing concession holders to adopt different practices in lieu of harvesting timber, palm oil production or mining activities.

⁶⁸ Rhee interview.

⁶⁹ Sunderlin interview; Claussen interview.

2.9 SUGGESTED CHANGES IN LAW AND PRACTICE

The land tenure situation in Indonesia has not changed for a century or more. According to one observer, many of the most important tasks for Indonesia is to take meaningful steps to clarify forestland tenure.

Fundamental problems require fundamental solutions. It is difficult to make meaningful decisions about carbon rights or benefits if the larger problems of overlapping concessions and unclear tenure are not resolved, however long that may take.

The first step, as many others have suggested, is for Indonesia to enact legislation that more strongly recognizes the customary land rights of communities under BAL. This can be done either by amending the BAL or adopting an entirely new law. Second, the primacy of the BAL over the Forestry Law should be recognized and enforced so that the BAL governs forestland in practice as well as by law. The language and intent of the law needs to be recognized and enforced. This, combined with stronger recognition of customary rights, will place local forest communities in a better position to create formal recognized forests, thus qualifying them for the share of benefits paid for REDD+ projects established in their forests (at least for as long as the current REDD remain in effect).

Community-based participatory mapping identifying all rights, including customary rights, to forestland and forests. This approach will enable all stakeholders to know and define the position and size of the forest and could be the first step in resolving conflicting claims to forest land.

Carbon investments may be plagued with competing claims for who, in fact, is entitled to contract for a given piece of land. These are potential clashes between central and regional governments; between regional governments and communities believe they have claims based on tradition and history to a piece of land that is not recognized by the government. However, the rights of local communities over their forests (not to mention any prospective carbon rights) are legally obvious. The government lays claim to most commercial forests, and even when local communities claim property rights, the process by which these would be recognized would be unclear (Takacs 2009).

In the LOI with Norway, Indonesia promised to clarify land tenure and to resolve compensation claims (see *Letter of Intent*, VII [4] 2010). Translating that promise into action is

⁷⁰ Rhee and Fay interview; Sunderlin interview.

INDONESIA CASE STUDY ANNEX A: LIST OF INTERVIEWS

Type of organization	Organization Name	Contacts interviewed & Title
Government	Ministry of Forestry	Dr. Ir. Hadi S. Pasaribu, Senior Advisor for Economic Affairs and International Trade
	Ministry of Forestry	Dr. Yetti Rusli, Senior Advisor to the Minister of Forestry
	Clinton Climate Initiative	Taufiq Alimi, National Coordinator-Indonesia
Local Government	Ministry of Forestry	Cucu Suryadi, District forest ranger
Village Government	Mantaya Sabrang	Samsudin Molano, Head of Village
	Mantaya Sabrang	Syamsu Usman, Village Elder
	Mantaya Sabrang	Murnia, Head of Free, Prior and Informed Consent (FPIC) group
	Mantaya Sabrang	Saifull Anwar, Village Facilitator
	HKM Forum	10 representatives
	HKM Forum	Eddy Perwanto, Forum Coordinator
	HKM Forum	Darsono, Head of Buluh Kapur HKM Group
Local civil society	Indonesian Center for Environmental Law (ICEL)	Giorgio Budi Indrarto
	Association for Community and Ecologically-Based Law Reform (HuMa)	Steni Bernadinus
	Sekala	Y.I Ketut Deddy Muliastra, Forest Governance and Mapping Specialist
International Institutions	CIFOR	William Sunderlin, Principal Scientist-Climate Change Forests and Governance Programme
	CIFOR	Andrew Wardell, Programme Director, Forests and Governance
	World Agroforestry Centre	Ujjwal Pradhan, Regional Coordinator, & Beria Leimona, Associate Research Officer
	World Bank	Tim Brown, Mubariq Ahmad, Emile Jurgens, Olivia Tanujaya
	ICRAF, RUPES project coordinator	Chandra Wijaya
Bilateral agencies	USAID Jakarta	Alfred Nakatsuma, Aurelia Micko, Carey Yeager, Tony Djogo, Ben Stoner, Bill Rush

	Forest and Climate Specialist, IAFCP (Indonesia Australia Forest Carbon Partnership)	Timothy Jessup
	Kemitraan Partnership	Avi Mahaningtyas, Chief of Economic and Environmental Cluster, and Farah Sofa, Program Manager Sustainable Development
International NGOs	Ford Foundation	Steve Rhee, Program Officer
	ClimateWorks Foundation	Chip Fay, Programme Coordinator
	WRI	Moray McLeish, Rauf Prasodjo
	The Nature Conservancy	Erin Myers Madeira, Senior Advisor, Forest Carbon Climate Change Team
Private firms	Starling Resources	John Claussen, Managing Partner and Rumi Naito, Associate
	McKinsey & Company	Dr. Gotz Martin
	Starling Resources	Rezal Kusumaatmadja, Partner
	PLTA Way Besai (hydropower company), CSR Director	Representative

3.0 NEPAL

3.1 STUDY OVERVIEW

Field visits Darryl Vhugen and Jonathan Miner of Landesa and Crystal Davis of WRI visited Nepal from April 26 to May 7, 2011 to gather information for the case study. The study conducted interviews in Kathmandu, Chitwan and Gorkha. In both Chitwan and Gorkha the team was able to meet with the REDD+ Networks engaged in piloting efforts.

3.2 BACKGROUND

Nepal is divided into four general geographic regions. They are: the Terai, the middle mountains; the high mountains and the snow-capped Himalayas (Achyarya et al 2009). Forest covers about forty percent of Nepal's total land area. Of the forested regions about 3.6 million hectares or 29 percent of Nepal's total land area is forested. About 10 percent is shrubland. Forests in the Terai area have been declining rapidly, whereas forests in the hills have been under community forest management programs for several decades, and are experiencing reforestation.

6 million hectares of forest are managed by the Government (Nepal Readiness Study Preparation Proposal PPR 2010). Forested area managed by Community Forest User Groups (CFUGs) represents the next biggest area, at about 21 to 25 percent of Nepal's forested area. A further 5 percent of the forest falls within protected areas, such as national parks, reserves, conservation areas and other areas. Negligible amounts of forestland fall into lease and collaborative forest (Nepal PPR 2010).

TABLE 3.1. FOREST MANAGEMENT

Forest Type	Percent Coverage
Government Managed	63%
Managed by Community Forestry User Groups	22%
Protected Areas	15%

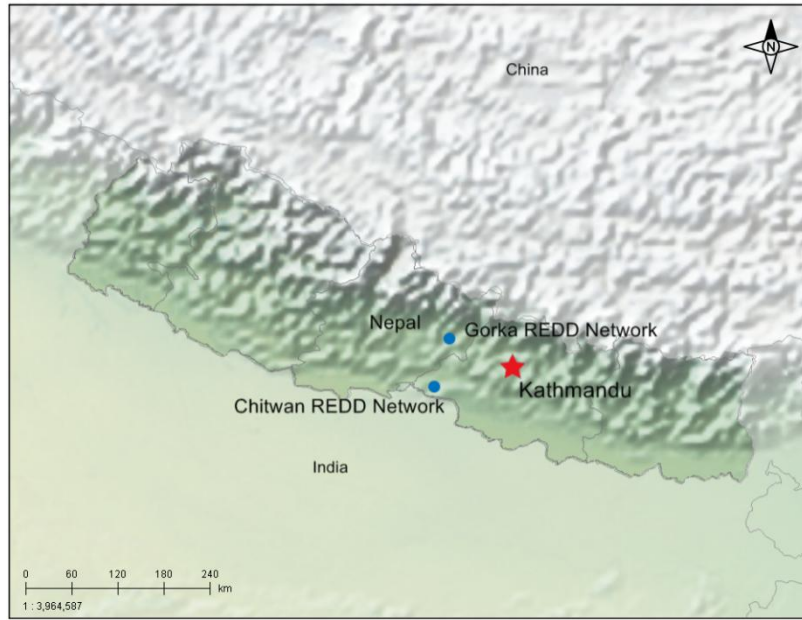
Over the past 30 years, Nepal's annual rate of deforestation has been extremely high, at roughly 2 percent per annum. Drivers of deforestation in Nepal vary across the geographic regions and the different management regimes. The Terai faces high demand for products, high population pressures, political instability, lawlessness, insecurity, poverty, weak governance and landlessness. In the hills, the high prevalence of CFUGs has effectively slowed deforestation. The remaining state land, which lacks effective funding support and trained forestry employees, weak law enforcement and institutions have led to poor forest protection.

⁷¹ Interview with Peter Branney, Program Advisor, and Ramu Subedi, Deputy Programme Manager at Livelihoods and Forestry Programme, 6/2011. See also Nepal PPR at pg. 30 and Ready for REDD at pg. 24.

⁷² Information from Dr. Dil Raj Khanal of FECOFUN on August 2011.

Much of Nepal's rural population, especially in the middle and high mountains is still heavily dependent on forest products for subsistence purposes. Although deforestation has slowed in these areas, forest degradation is still a factor. Drivers of forest degradation include increased use of timber for shingles or hut construction, fuelwood consumption and smuggling of timber to Tibet, as well as heavy lopping of trees for livestock fodder, and firing to induce a fire grass for livestock (CB YPP 2010) F

FIGURE 3.1: MAP OF NEPAL AND LOCATIONS VISITED FOR REDD+ INTERVIEWS



3.3 NEPAL'S LAND AND FOREST LAW

3.3.1 LAND LAW ⁷³

Nepal is in the process of revising its legal framework governing land. While the target timeline for the land reforms is 2015, Nepal's Land Commission has yet to provide recommendations, and finalization of laws will likely be delayed. It is expected that the new legal framework will be governed by principles set forth in the 2007 Interim Constitution, the 2006 Comprehensive Peace Accord, the 2008 Common Program of the National Consensus Government, and the Ministry of and Management Three Year Interim Plan (USAID 2011). Land rights and land access in Nepal is a critical issue, currently over 24 percent of the population is considered landless (Human Development Report of Nepal 2004).

The Interim Constitution of Nepal, which became effective in 2007, grants the right to acquire, own, sell and otherwise dispose of property. The Comprehensive Peace Agreement, signed by Nepal's Prime Minister and the Chairman of the Communist Party of Nepal (Maoist) in 2006, calls for the: (1) nationalization of forests, conservation areas, and other lands that Nepal had controlled; (2) the end of feudal land ownership, establishment of a Land Reform Commission and adoption of a program of scientific land reform; (3) adoption of policies to provide land to landless and disadvantaged groups;

⁷³ For more information, see <http://www.usaidlandtenure.net/usaid/products/profiles/nepal/nepalcountryprofile> (accessed June 2011).

⁷⁴ Interview with Dr. Bill Paterson and Netra Sharma of USAID (April 28, 2011).

prevention of the ability to obtain land through corruption within government offices; (5) support for Internally Displaced Persons (IDPs); (6) prohibition against illegal seizure of private property; and (7) support for principles of nondiscrimination.

Land in Nepal is classified as: (1) private land and (2) state land. Nepal recognizes two private land tenure types: owned and leasehold. About 27 percent of the land is privately held. Landowners have rights to exclusivity and use of their land. Landowners can freely transfer their land or pass the land by inheritance. An estimated 10 percent of rural households are registered as tenants under the Land Act of 1964. The actual number of households renting land is believed to be three times that amount. *Guthi* land is land held by religious bodies for religious or philanthropic purposes and is not subject to taxation, such as temples, schools and hospitals. It accounts for only 0.03 percent of land in Nepal.

TABLE 3.2: LAND CLASSIFICATIONS IN NEPAL

Land Distribution	Percent Cover
State-owned	73%
Privately-owned (including leasehold)	27%
<i>Guthi</i>	.03%

By far the largest category of land in Nepal is state land, estimated to be 73 percent of the total. State land includes public land (defined to include wells, ponds, pathways, grazing land, cemeteries, markets, etc.) and government land (defined to include roads, government offices, and land under government control such as forests, lakes, rivers, canals, and barren lands). *Guthi* land under CFUG management also falls in the category of state land. The vast majority of Nepal forests fall within the government land classification.

3.3.2 FOREST LAWS

The Forest Act 1993 (2049) classifies forest as either private forest or national forest. Private forests are forests that are planted, nurtured, or conserved on private land owned by an individual pursuant to law. All other forests are national forests. Only about 2 percent of Nepal forests are on private land.

The Forest Act identifies five types or modalities of national forest:

1. Government managed forest is forestland managed by the state. Ownership of all forest products of government managed forest is vested in the government, although the government may grant a license for the use of such products.
2. Protected forest is forest that the state has designated as having special environmental, scientific, or cultural importance.
3. Community forest is forest that the state handed over or transfers to a Community Forest User Group (CFUG) for development, conservation, and utilization in the collective interest. The state retains ownership of the forestland but the CFUG is given user rights that can last, based on a perpetual basis, as long as the community meets certain standards.
4. Leasehold forest is forest that the state grants to individuals or entities to (a) produce raw materials required for industry; (b) sell, distribute forest products by promoting production and afforestation; (c) operate tourism in a manner compatible with conservation and development of the forest; (d)

⁷⁵ Interview with Bibek Chapagain (Director) and Nira Bhatta (Program Associate) at Winrock USA International on May 18, 2011.

⁷⁶ Interview with Krishna Prasad Acharya, Director General of Department of National Parks and Wildlife Conservation on April 30, 2011.

agroforestry; and (e) operate insect farms. Leaseholds are granted for 40 years and can be renewed for additional 40 year terms.

5. Religious forest is forest transferred to a religious body, groups, or community for development, conservation, and utilization. The state retains ownership of the forestland and the power to reclaim the land (USAID 2011).

The Forest Act broadly defines forests to include all forest areas, including wasteland and uncultivated surrounding and adjoining forests, and all rivers and streams within forests. The state has the authority to designate for protection any part of a national park, special environmental, cultural or scientific significance. The Forest Act also gives the state the authority to transfer some degree of management of forests to sanctioned users, including the ODFs, protect forest from overuse and to rehabilitate degraded sections of the forest. Forest Regulations 1995 (2051 BS) set additional standards for the operation of government managed forests, protected forests, and community forests.

3.3.3 THE LEGAL STRUCTURE OF COMMUNITY FOREST USER GROUPS

The legal framework governing forests has favored the formation of community management, predominantly through CFUGs. These groups are given potentially permanent forest areas, but the state retains ownership of the substantial influence over forest uses and the benefits derived from forest management. The District Forest Office (DFO) has the power to designate potential Community Forest areas. Within some districts that have begun to implement community forestry, the DFO has set up District Forest Coordination Committees (DFCCs) which determine modalities of forest uses that will be allowed in these districts, new CFUGs can only be formed where forest land has been previously designated eligible for community forestry by the DFO or DFO. Areas where DFCCs have not been set up, the actual approval of new CFUGs takes place at the local level through District Forest Officers.

Once a CFUG is formed, the 1995 Forest Regulations limit group to collecting, selling, and distributing of forest products only in accordance with an approved plan. The Regulations also prohibit certain activities, such as clearing land for agriculture, destroying the forest, transferring or mortgaging the land, and building huts and sheds. The DFOs are authorized to enforce these regulations, both through physical inspection of CFUG operations and also through direct approval of CFUG operation plans. The operation plans are generally reviewed every five years, though this process is not established in the regulations.

The Regional Forest Directorate, through the DFO approves forest access and has the right to cancel and suspend rights if a CFUG is not conforming to the forestry regulations. It provides:

“In case the User Group cannot operate its functions in accordance with the work plan in the Community Forest handed over pursuant to Section 25 or operates any functions which may cause significant adverse effect in the environment or does not comply with the terms and conditions to be complied pursuant to this Act or the Rules made thereunder, the District Forest Officer, may decide to cancel the registration of the User Group and take back such Community Forest As Prescribed that, such User Group shall be given reasonable time to submit its clarification before making decision to cancel the registration of the User Group and take back the Community Forest (Forest Act 2049, Chapter 27[1], 1993)

⁷⁷ Interview with Ram Nandan Sah, Undersecretary, Department of Forestry on May 6 2011.

⁷⁸ Interview with Jeeban Thakur, District Forest Officer, on May 11, 2011.

⁷⁹ Interview with Bishma P. Subedi, Executive Director of Asia Network for Sustainable Agriculture and Bioresources (ANSAB) on May 20, 2011 and Krishna P. Acharya Interview.

These requirements that dissolution only occur where a CFUG is abusing its forest use rights would give them some security from the potential for arbitrary government decisions to retake the land. However, the Act does not provide a robust mechanism for a CFUG to appeal an adverse decision. For example, the User Group which is not satisfied with the decision made by the District Forest Officer pursuant to section (1), may file a complaint to the Regional Forest Director as prescribed by the decision of the Regional Forest Director in respect of such complaint shall be final. (Forest Act, 1993, Section 27(2)) Since the only appeal mechanism available is to a higher official within the Forest Office the CFUGs have little independent legal protection from arbitrary loss of their forest land.

Though there is little robust legal protection for CFUGs, interviewees expressed a belief that the CFUGs have sufficient political power and importance that this risk of arbitrary government action is not a real concern. Peter Branney and Ramu Subedi at DFDC and the Forests and Forestry Program asserted that since nearly 50 percent of Nepal's population belonged to a CFUG it is politically impossible for the government to aggressively dissolve CFUGs without triggering protests and political turmoil. The interviewees asked about this issue reported that any CFUGs had actually ever been dissolved or their land taken away. Dil Raj Khanal of FECOFUN, a national organization that represents many of the CFUGs, reported knowing of only one instance where a CFUG came close to being dissolved, even if the risk is low at this time, political changes in the future could cause this to become a risk.

3.3.4 THE FORESTRY SECTOR POLICY OF 2000 AND COLLABORATIVE FORESTRY

The government revised its forest policy in 2000. The Forestry Sector Policy of 2000 proposed that a Community Forest Management (CFM) zone be established in the Terai region in order to relieve some of the pressure on the forests located in the Terai region. The Forestry Policy itself does little more than mention the term, but it was somewhat more developed by a CFM Directive in 2003 which defined the mechanisms for CFM. (Forests and Forestry Policy, 2000, p. 33) The CFM Directive is in consonance with the approved forest management plan for the livelihood and achievement of multipurpose benefit including economic benefits maintaining ecological balance (Forest Act, 1993, p. 33).

The general approach is for the government and those living in the vicinity of the Terai forests to collaborate in managing those forests (Forestry Sector Policy, 2000). There are four objectives: (1) meet demand for forest products; (2) create employment to assist in reducing poverty; (3) enhance biodiversity; and (4) manage the Terai forests in order to increase income from forest products to the local community and the national government (Pratt, 2007).

The Forest Act 1993 has no specific provisions regarding collaborative forest management model. Rather, the Ministry of Forests and Soil Conservation (MoFSC) has claimed authorization for the development of its CFM model under its authority to prepare plans or the management of national forests (Pratt et al., 2007). CFM has not been widely implemented because of the unclear legal or regulatory provisions make it hard to analyze. However, from the few CFM schemes that have been implemented, it appears that the mechanism includes the following key components: (1) it is used in Government Managed Forests; (2) DFCCs decide where to implement the projects; (3) they are overseen by a Community Forestry Office; (4) forest users from near the forest (within 5 kilometers) and further away are represented; (5) 70 percent of the revenue from the sale of forest products goes to the central government and 25 percent to the local community; (6) forest users have forest access rights and are allowed to sell forest products (Pratt, 2007).

⁸⁰ Peter Branney and Ramu Subedi Interview.

⁸¹ Interview with Dr. Dil Raj Khanal of FECOFUN on May 4, who reported only one instance where a CFUG came close to being dissolved.

It is important to note that CFM is envisioned as a scheme to enhance forest management of government forests by engaging local populations; however it is dramatically different in structure. In CFUGs, the community gains a high degree of control over the forest, with the central government retaining only the ownership of the land. Under CFM the local community is only one of stakeholders represented on the Community Forestry Group. With respect to revenue, under the CFUG model the central government does not receive revenues from either the land or from forest products that come off the land, but under CFM, local community looks to receive revenue, with the central government receiving 75 percent, and the local government and CFG sharing the remaining 25 percent.

3.4 NEPAL'S DEVELOPING REDD + STRATEGY

Nepal is participating in the World Bank's Carbon Partnership Facility (CPF) and has a revised R-PP for funding approval in October 2010. Nepal is also receiving funding from a Norwegian Agency for Development Cooperation (NORAD). Other donors (UK, Finland and Japan) are also committed to provide support to REDD+ readiness in Nepal through a Multistakeholder Forestry Program.

Nepal's designated authority for the UNFCCC process is the Ministry of Environment and Forestry. REDD+ governance is being led by the Ministry of Forests and Soil Conservation (MoFSC), which has put in a three-tiered structure to manage national readiness. The Apex body provides ministerial guidance for overall REDD+ coordination and will be responsible for approving REDD+ strategies. Under the Apex body, the REDD working group consists of representatives from government, civil society and the donor community. The working group takes input from stakeholders also responsible for preparing Nepal's REDD+ Strategy. The private sector, community organizations other stakeholders interested in the REDD+ process (Nepal RPP 2010). The third tier is the REDD Cell, located in the MoFSC, having responsibility to actually undertake REDD+ readiness activities.

The 2010 RPP calls for a National REDD+ Strategy to be formulated based on lessons learned through a three year preparation plan that will implement activities aimed at gathering information on the value of forests and degradation (Nepal RPP 2010).

The NORAD-funded REDD+ pilot projects are intended to assist this process of information gathering for Nepal's future REDD+ strategy. These are NGO and civil society projects, rather than government projects, but the lessons learned from the piloting are intended to feed into the government REDD + preparation process. The primary NORAD pilot project REDD+ payment is now functional in three watersheds. In each, a REDD Network has formed to coordinate activities including wood alternative programs, forest preservation, and carbon sequestration measurements. Recently the pilot project has rewarded/distributed payments (US\$ 90,000) to CFUGs of these three watersheds. carbon sequestration. As an aspect of B C F 5 8 Ng` Y Z Z c f h`] g` h \ Y` d f t d f U h] c b` used for capacity building in nine districts.

At this time, it seems the formulation of the next REDD+ Strategy has slowed. An interim version of Nepal's REDD+ strategy has been circulated, but appears that the interim strategy does not have the support of all important stakeholders. When asked about Nepal's strategy now that the RPP is approved, the members of the REDD Cell expressed a need to get input from a wider set of stakeholders.

⁸² B Y d U` D` g` U` X` I` d` X` U` h` Y` g` c` b` B Y d U` N` g` g` <http://www.forestcarbonpartnership.org/pcf/whobe/75> Y` U` W W Y` g` g`

⁸³ See UNFCCC Clean Development Mechanism, list of designated national authorities. Available at http://cdm.unfccc.int/DNA/index.html?click=dna_forum

⁸⁴ Interview with Dr. Bhaskar Karky, Resource Economist at the International Centre for Integrated Mountain Development (ICIMOD) 2011, noting the strategy had not been approved by the Ministry of Forestry, and Interview with REDD Cell 2011, April 29

groups and then to craft a strategy based around nine particular drivers of deforestation that had been identified in the PRP. It seems likely that the government will form a central clearinghouse that would be empowered to enter into carbon transactions with investors and maintain a central carbon registry. How this clearinghouse would be structured or managed is yet unclear (Nepal RPP 2010). F Y [U f X] b [` U W h i U-D D d] J x a y b h z j Y B Y d U i n g g E ` c Z ce n t r a l [] V] `] government channels where competing development needs could lead to a diversion of REDD+ funds to other activities (B Y P P, p. 42010). In order to avoid this risk, P P suggests the formation of a national trust fund, managed by a stakeholder board. A national level trust fund is established, but interviewees indicated that this was still a preferred solution. REDD+ funds are being distributed through a trust fund is also going forward through the Forest Carbon Trust Fund, which will be distributing REDD+ seed money to the three NORAD pilot projects.

In order for Nepal to successfully reduce its overall rate of deforestation it will be crucial for the strategy to effectively deal with deforestation in the Terai where rates are higher and where the CFUG model has not been broadly implemented. From interviews with the REDD Cell and members of MoFSC, it seems that the preferred approach will be to expand collaborative forestry efforts. This preference is due to the fact that collaborative forest management arrangements allow the MoF to retain greater control over the forests and also continue to generate and collect revenue from forests, whereas under CFUGs such control and revenue disappears. As of this study there are very few collaborative forestry programs implemented. Whether this model will be successful in promoting forest conservation in the Terai in the same way that CFUGs have been successful in the Middle Hills will be seen.

3.5 REDD+ BENEFIT DISTRIBUTION

An overall national plan for REDD+ benefit distribution has yet to be settled upon. INRPA suggests that the varied forest types might necessitate a sub-measurement and compensation scheme, but it notes that transaction costs suggest an approach unwarranted (Nepal RPP 2010).

The NORAD pilots are being used as a test case for benefit distribution at the local level. Each pilot divides numerous CFUGs within a watershed area into a REDD Network. The Networks will then receive REDD+ seed money, and eventually carbon offset money for the carbon sequestered within their watershed. At this point though, benefits will not necessarily flow to individual CFUGs on the basis of how much carbon they actually sequestered. Rather, the Networks will be following criteria to distribute funds to their member CFUGs: 1) the amount of carbon sequestered within the CFUG, 2) the CFUG's index within the CFUG, 3) the extent of indigenous and socialized (*Dalit*) groups present, and 4) the percentage of women-headed households in the CFUG.

The interviews conducted with the REDD Networks in Chitwan and Gorkha made it clear that the benefits to be distributed are not going to be direct financial payments. Rather, REDD+ revenues will go into funds that each CFUG already has established to pay for programs such as fuelwood alternatives, and other livelihood programs. When Nepal enters a full implementation stage for REDD+ distribution, at least within the CFUGs, will likely follow the distribution model being used in the pilots.

In Nepal's forest land situated outside of the CFUG structures, the issue of benefit distribution is substantially less clear. Such lands include the Government Managed Forests and the Leasehold Forests. Interviewees within the Ministry of Forest and Social Conservation frequently have advocated forestry models as a vehicle through which REDD+ could be implemented in these forests,

⁸⁵ Interview with REDD Cell on April 2010.

⁸⁶ Bhaskar Karky Interview.

⁸⁷ *Id.* See also Operational Guidelines for Forest Carbon Trust Fund (2011) <http://availableat.natureredd.net/wp-content/uploads/2011/06/REDF-Operational-Guidelines-English.pdf>

⁸⁸ Bhaskar Karky Interview, See also Operational Guidelines for Forest Carbon Trust Fund (2011).

particularly in the areas discussed above, under the CFM the government is entitled to 75 percent of the proceeds of any forest products from CFM lands. No REDD+ pilots have yet been launched in CFM areas. Interviewees did not discuss plans for benefit distribution within Government Forests or Leasehold forests, but given the apparent preference to try to upscale CFM, that modality will likely be used in Government Managed Forests.

3.6 ENTITLEMENT TO RECEIVE REDD+ BENEFITS UNDER NEPALESE LAW

Nepal has not adopted laws creating new rights or explicitly outlining entitlements to receive benefits from carbon sequestration efforts. Existing legislation governing land, forests, and mining all have substantial areas of overlap that cast serious uncertainty over entitlements to receive REDD+ benefits. This section first discusses the conflicts between the various laws and then discusses entitlements within the CFUG and CFM structure.

3.6.1 OVERLAPPING LEGAL LAW

Contradictory and overlapping legal provisions in Nepalese law pose significant problems for legal clarity just within the land and forestry sector. One interviewee said that with respect to the Local Self Government Act of 1999, there are 43 other Acts amended in order to clarify areas of overlap. It will be difficult to deal with such legislative problems is currently lacking though, and will likely continue to be absent. Nepal's new constitution is finalized, already missed several lines set forth in the interim Constitution, it is unclear when Nepal will have its new constitution.

One vehicle through which Nepal is prepared to receive REDD+ is the CFUG structure. If the Forest Act, which governs the CFUG structure, is followed, entitlement to REDD+ benefits seem relatively clear. However, inconsistent provisions in other laws raise the potential for contrary interpretations on entitlement. The two primary laws through which CFUG entitlements could be compromised are the Local Government Act of 1998 (LSGA), and the Nepal Mines Act of 1966.

The LSGA gives Village Development Committees (VDCs) the right to sell forest resources to generate income from within the VDC (Acharya et al. 2009). VDCs cover the entire country, the next level under the District level. The LSGA specifies that forest resources falling within the VDC area are the property of the VDC. The VDC includes a provision that

Income May Be Generated Through Selling: The Village Development Committee may sell the following objects situated within its area:

- (a) Soil of governmental barren land
- (b) Products of public ponds or gardens
- (c) Assets of the Village Development Committee
- (d) Among the forest products situated within the village area, dried timber fire woods, branches, splints, twigs, roots etc
- (e) Straw, grass (etc. Local Self Government 1998, Section 58)

The legal permission to sell forest products could quite plausibly be interpreted to include carbon of course depending on how these lists are interpreted. Carbon sequestration differs from other forest products

⁸⁹ Dil Raj Khanal Interview.

⁹⁰ Id.

it is not extractive in nature unlike the selling of firewood, the selling of carbon credits derived from a forest requires actually enhancing rather than extracting the forest. All the forest products listed as under VDC authority in the LSGA are extractive in nature. Nonetheless, it should follow that carbon credits do not fall naturally within that authority. Nonetheless, list is exhaustive in nature it may be that a VDC could successfully argue for inclusion of carbon credits within the bundle of forest products it is authorized to sell. That interpretation would clearly conflict with the forest use rights CFUGs. CFUGs will invariably be within VDC boundaries, so this overlap raises the potential for conflict over REDD+ funds between VDCs and CFUGs. Some of the interviewees expressed the sentiment that the VDC would actually be a better administrative unit for distributing REDD+ funds. At this point they lack the capacity to function effectively, and political turmoil within the elections prevented VDC positions for nearly 10 years. In the future the VDCs gain additional capacity to actually administer their land areas under the LSGA, they could bring a strong legal argument that the CFUG is entitled to receive REDD+ or other carbon credit funds.

Similar overlap in law can be found with respect to minerals. According to the Forest Act of 1993, the Act gives ownership to CFUGs, while the LSGA 1998 gives ownership to the VDC and District Development Committee (Acharya et al. 2009). Neither the Forest Act nor the LSGA define mined products. The Mines and Minerals Act of 1985 defines minerals as a chemical substance with a chemical compound of any definitive physical properties and elements of petroleum and gas, located on the surface or underground of the land. Under the Act, minerals lying or discovered on the surface or underground in any land belonging to an individual or the government within Nepal shall be the property of the Government of Nepal (A. G. Y. W. J. c. b. 1985).

It is unclear whether sequestered carbon should fall within the definition of minerals in the Mines Act. The most straightforward and beneficial interpretation would be to recognize that although carbon itself is an element, the sequestration of carbon is taking place in organic substances, i.e. REDD+. However, if sequestered carbon is interpreted to fall within the definition of minerals, then there is a potential for the government to claim ownership of it and divert the benefits away from the rights holders, such as CFUGs.

3.6.2 COMMUNITY FOREST USE RIGHTS GROUPS

Despite the potential for legal conflict over carbon sequestration benefits, the primary focus of Nepal's REDD+ efforts are the CFUGs. In the context of the CFUGs most interviewees confirmed that the communities themselves will be the beneficiaries of potential REDD+ payments. For example, K.C. Paudel, Joint Secretary of the Environment Division of the Ministry of Forestry and Soil Conservation asserted that in the community forest contexts the community owns the carbon in the trees.⁹¹ This perspective does appear to flow naturally from the Forest Act of 1993 and the 1995 Forest Regulation (Acharya et al. 2009). Though the government maintains ownership over the land and also provides some restrictions as to what uses a CFUG is allowed to exercise over the forest, the Act does appear to contemplate the reservation of any use rights or benefits from forest products to the govt. The Act provides that

The District Forest Officer may hand over any part of a National Forest to a Users Group in the form of a Community Forest as Prescribed entitling to develop, conserve, use and manage the Forest and sell and distribute the Forest Products by fixing their prices according to Work Plan. While so handing over a Community Forest, the District

⁹¹ Interview with Bibek Chapagain, director of Winrock International, and Nira Bhatta, Program Associate on May 5, 2011.

⁹² *Id.*

⁹³ Interview with Dr. K.C. Paudel, the Secretary of the Environment Division of the Ministry of Forestry and Soil Conservation (REDD Cell member) on April 29, 2011.

Forest Officer shall issue a certificate of title if the Community Forest (Chapter 5, Section 25[1])

The Forest Act also provides definition of forest products:

Ī Forest Products means the following products which are contained or found in or brought from forests:

(1) Timber, firewood, charcoal, catechu, rose, soil, bark, lac, pipla, pipli (piper longum), or

(2) Trees, leaves, fruits, flowers, mahwa (bassia longifolia), chiraito (swertia chiretta), Kutki (picorhiza Kurroa) and all kinds of wild herbs, vegetation and different parts or organs thereof, or

(3) Boulders, soil, stones, pebbles, sand, or

(4) Birds, wild lives and trees there (Chapter 5, Section 24) [1]

This list would appear to be quite broad, potentially granting a great deal of extractive power to CFUGs. However, the Forest Regulation 2051 of 1995 stipulates limitations on CFUGs. The Regulations provide more detail on the structure of CFUG work plans and permitted activities within forests managed by CFUGs. The activities prohibited by the Regulations include:

Ī (a) To destroy the Forest or mortgage or otherwise transfer the ownership of the land covered by the Community Forest; (b) To clear Forest areas for agricultural purposes or to build huts and houses; (c) To take any action which may cause soil erosion or kill wildlife in violation of prevailing laws; (d) To extract or transport rocks, soil, boulders, pebbles, sand etc. (Chapter 5, Section 3) [a]

Outside of these distinct prohibitions, the Regulations allow freedom for the user group to make use of forest products and to market excess products outside the user group, so long as those uses conform to the CFUG operation plans. For example the regulations regarding maintenance of receipts and records clearly contemplate the ability of CFUGs to sell forest products to other groups (Chapter 4, Section 31) and run an industry based off forest products (Chapter 4, Section 32). Similarly, regulations regarding timber allow for the possibility to transport timber and other forest products for marketing outside the CFUG (Chapter 4, Section 35).

Nowhere in either the Forest Act or the Regulations is there any indication that the Government reserves itself the right to benefits from forest products on CFUG forest land. Only land ownership is reserved to the Government, but all allowable benefits that can be derived from the forest are given over to the CFUGs.

Neither the Act nor the Regulations mentions carbon sequestration or payments. Neither is carbon mentioned as a forest product by the Forest Act. As discussed above, carbon sequestration is a forest activity, rather than extractive, so just as carbon credits do not fit neatly within the list of forest products that a VDC could sell under the LSGA, they do not fit neatly within the list of forest products defined in the Forest Act. However, if all benefits from forest products flow to the CFUGs rather than the government, it seems logical that payments from REDD from eventual carbon sequestration credits that flow to Nepal as a result of sequestration and preservation of CFUG forests legally should accrue to individual CFUGs. This is, however, a substantial area of risk within the current legal framework that should be clarified as part of Nepal's REDD strategy.

If REDD+ and carbon credit money does indeed flow to CFUGs, it should be used according to the rules governing CFUG funds. Chapter 5 of the Forest Act provides that each CFUG shall maintain a fund of its own into which shall be deposited the amount of grant, assistance

donation received from any person or organization, (c) The amount received from the sale and distribution of the Forest Product, (d) The amount collected through fine, (e) The amount received from other sources (Forest Act, Chapter 9, Section 99[3]). This fund is then used to pay for any expenses incurred by the group for its activities under the operation plan. If there is money left in the fund, they may spend for the activities of other public interest Forest Act, Chapter Section 45[4], 1993). Money flowing into the CFUG from REDD+ or other carbon credits would need to be funneled into these funds, and there is no provision in the fund rules allowing money to be directly distributed back to individual community members or households. Rather, the money would need to be spent on activities of the CFUG. As such, it would appear that the entity holding the entitlement to receive REDD+ benefits would be the CFUG itself, not individual households.

This conclusion that individuals and households within CFUGs would not receive direct payments is consistent with information gathered from interviews with the REDD+ pilot sites in Chitwan and Gorkha. The REDD Network in Chitwan communicated that funding that comes from the REDD+ pilot would be used to pay for specific projects for the whole community, or for livelihood projects targeting small communities within the network. Similarly, the REDD Network in Gorkha intends to distribute money coming from REDD+ pilot among the various CFUGs within the Network, and each CFUG would use the money according to the rules that it already had in place for its existing funds. These funds supported livelihood and alternative income generation projects, and the REDD+ money would go to these projects within each CFUG, rather than to individuals or households.

3.6.3 COLLABORATIVE FOREST MANAGEMENT

Collaborative Forest Management exists primarily as part of a forest policy promulgated by the MoF rather than a well-defined legal or regulatory entity governed by legislation, like the CFUGs. Additionally, very few CFM areas currently exist. These two factors make it somewhat difficult to analyze entitlements to REDD+ or other carbon sequestration benefits to the same extent as is possible under the CFUG model. The most relevant aspect of CFM is the revenue sharing breakdown. As of 2011, 75 percent of revenues from CFM go to the central government. It seems likely that if CFM is to include REDD+ activities, this is with the vast majority of REDD+ revenues or other carbon sequestration credits generated from CFM land will go to the central government. In the current setup the remaining 25 percent of revenues are to go to the local government, which would be shared with local communities that participate in the CFM. However the CFM policy does not specify how funds are to be shared among the local government and community. Thus, entitlements to benefit from REDD+ under the CFM model is 1) not clearly spelled out as a creature of forest policy rather than law. Both factors make these entitlements extremely unclear and potentially unenforceable by local communities.

3.6.4 A NEW CONSTITUTION

Nepal's current process of drafting a new constitution creates legal uncertainty over entitlements. The current lines of federal and provincial/district divisions are unclear.

It seems likely that carbon related matters will be managed by the central government; however carbon forests will likely be managed at the provincial level. Under such a division it is as yet unclear how community interests and rights over forest carbon will be protected.

⁹⁴ Interview with members of REDD Network in Chitwan on May 11.

⁹⁵ Interview with members of REDD Network in Gorkha on May 12.

⁹⁶ Id.

3.7 SOCIAL AND ENVIRONMENTAL IMPACTS OF THE REDD+ SYSTEM ON FOREST-DEPENDENT COMMUNITIES

To some extent it is too early to predict the social and environmental impacts of REDD+ on forest dependent communities. There is the potential that the distribution of REDD+ benefits could create both conflict and benefits depending on the area of Nepal in question. For example, in the CFUGs situated in the middle hills and high hills, it is likely that REDD+ will have a small but beneficial impact both on the social and environment. The benefits seem likely to be channeled into development and livelihood programs if these benefits are indeed distributed according to the criteria discussed previously for poorer communities, indigenous communities and headed households. They might not receive measurable benefits. It should be noted, however, that these benefits will not in the form of individual payments, but rather extra funding for other development and livelihood programs.

If the payments coming through REDD+ become sufficient to attract attention from Village Development Committees or District Forest Offices, the somewhat tenuous legal position of CFUGs could lead to conflict over benefits. In a worst case scenario, it could be possible for the Ministry of Forestry, through the DFOs, to dissolve or control CFUGs in order to capture REDD+ benefits for the state rather than for the CFUGs.

Even within the CFUGs, the current system of using a trust fund to collect and distribute money from the sale of excess forest products could easily be subject to local elite capture. In theory each CFUG is to use these funds for development, planting, and livelihood programs according to their own agreed upon plan. However, in reality it is likely that a good portion of this will be captured by local elites (Kanel and Karki 2004). Since payments from the REDD+ pilots are to flow into these same local trust funds, a similar risk will arise for REDD+ money. This situation could raise the potential for inter community conflict, especially if community members are forced to make land use changes but then the benefit come as a result of their efforts.

In current practice the participation of indigenous groups within CFUGs varies from community to community. Representatives from the Nepal Federation of Indigenous Nationalities (NEFIN) said that in most CFUGs indigenous people are not represented in CFUG decision making bodies, though in parts of Nepal where they have higher population concentrations they are better represented. Additionally, even within the NORAD REDD pilots, indigenous peoples reportedly had not been well informed of their rights and responsibilities.

Representation of women within CFUG decision making is also stipulated. The guidelines for community forestry state that women should comprise 50 percent of the CFUG committee. However, a 2005 study found that only about 25 percent of CFUG members were women, and the interests of women and other marginalized sectors, who earn their livelihood through agriculture, are seldom addressed (Acharya 2005). The REDD Networks visited during the study reported that each CFUG had sent one male and one female representative to the Network field visit meetings, though women far outnumbered men, and the men rarely spoke up. There is room for improvement in ensuring full and meaningful participation of women within REDD+ projects in Nepal. If done well, this could serve as a mechanism for encouraging CFUGs to better integrate the female members into their decision making processes.

⁹⁷ Interview with Pasang Dolma Sherpa, National Coordinator at Nepal Federation of Indigenous Nationalities (NEFIN) on May 5

⁹⁸ Id.

3.8 WILL DISTRIBUTION OF REDD+ BENEFITS INCENTIVIZE THE DESIRED LAND USE BEHAVIOR?

It is unclear that REDD+ benefits will be sufficient to incentivize substantial changes in land use in Nepal. The CFUGs already have an established history of forest conservation and reforestation, so REDD+ benefits flowing to the CFUGs may simply be an added benefit for what CFUGs are already doing, rather than an incentive to change practices. Interviewees from the REDD Network in Chitwan were asked how the REDD + pilot was changing their behavior and reported that not too much has changed other than to reduce the use of fuel wood taken from common forests. The forests suggest that some of the indigenous communities within the pilot watershed were considering REDD+ as a reason to stop shifting agricultural practices. The Gorkha REDD Network expressed a similar sentiment that the REDD+ is encouraging what they were already doing. The pilot targeted communities on reducing the use of forests as fuel wood sources, but it did not appear evident that the community was engaging in significantly more tree conservation or planting as a result of the pilot.

Outside of the CFUG structure REDD+ may not be sufficient to change land use. First, it is not yet clear how Nepal would successfully conduct REDD+ activities within protected areas, managed forests and other community forest management systems (such as sacred forests, religious forests, etc.). To do so the CFUG model or a successful collaborative forestry model would need to be significantly expanded. The capacity and political will to achieve this would be substantial. However, even if this scaling was achieved, the opportunity costs for avoiding deforestation may be too high. Outside current CFUGs, forestry land uses, which tend to involve resource exploitation rather than conservation, may simply be too lucrative for REDD+ or payments to incentivize land use changes.

Land use within the Terai region also presents a particular challenge. The lowland region of Nepal contains much of the country's fertile land, and is also the site of significant political and conflict. Much of the conflict over land in the Terai is between groups that migrated from the low hills of the Terai and groups of traditional forest users who were already in the area. Land conflict, alternative land uses and agriculture in the Terai because of its proximity to Indian markets. The relatively small REDD+ payments that may come as a result of greater forest conservation in the Terai will likely be insufficient to incentivize any land use changes. This situation may be especially true if the government applies the 75/25 benefit share used in the collaborative forestry pilot projects in that region.

3.9 SUGGESTED CHANGES IN LAW AND PRACTICE

The CFUG structure has been successful for forest promotion in Nepal, but some changes in law will be needed to ensure CFUGs can also succeed in a REDD+ context. Individual CFUGs need to have a more solid legal foundation upon which to defend their entitlements. In order to provide sufficient legal clarity, some amendments to existing law or the passage of a new carbon rights law will be needed. The risks posed by the inconsistent provisions of the Forest Act, the Local Self Governance Act and the Mines Act need to be dealt with in order to provide sufficient clarity to benefits. Additionally, the problem of CFUGs having no right to appeal adverse dissolution decisions to outside the Ministry of Forest and Soil Conservation must be addressed.

With respect to the Collaborative Forestry model, greater clarity on rights is necessary for stakeholders will be necessary. Currently, Collaborative Forestry is not well fleshed out in Nepal's laws and regulations, and it is not widely implemented. If Nepal intends to rely on this model in the Terai rather

⁹⁹ Interview with REDD Network in Chitwan on May 1, 2011.

¹⁰⁰ Interview with REDD Network in Gorkha on May 11, 2011.

¹⁰¹ Interview with Dr. Naya Sharma Paudel of Forest Action on May 4, 2011.

up-scaling the CFUG system, then much greater legal clarity will be necessary to identify potential recipients of REDD+ or other carbon payments and to incentivize land user change. Local communities should also receive a higher percentage of REDD+ revenues than they do of forest product sales revenues.

Given that all of Nepal's current legislative and political efforts are focused on the drafting of a new Constitution, it seems unlikely that the needed legislation would be drafted or passed. Nonetheless, REDD+ efforts may flounder without this clarity. Nepal might consider drafting new carbon rights legislation clearly indicating that it overrides contrary provisions in existing law. The preferred structure of such legislation would be to clearly identify the beneficiaries of carbon sequestration within each of Nepal's five forest modalities listed in the Forest Act. The legislation should also clarify whether carbon should be considered as a product of mining, or a product of the forest itself. Nepal is currently preferred. Nepal is developing REDD+ strategy after the NORAD pilots continues to be focused on CFUGs rather than VDCs, then it will also be essential to clarify that CFUGs rather than VDCs are entitled to REDD+ benefits.

A change in practice could lead to greater forest preservation and thus additional carbon sequestration would be to allow further growth of CFUGs. Many interviewees expressed the sentiment that the government was reluctant to expand the presence of CFUGs in forestland. It makes sense in that the MoFSC is losing control over land when it grants permission of a new CFUG. However with a clear track record of successful reforestation by CFUGs, if Nepal is serious about using REDD+ as a mechanism to generate additional carbon sequestration it ought to encourage rather than thwart CFUG formation. This approach should be especially relevant in the Terai region where it was reported that many groups are operating as de facto CFUGs, but have not gained approval from the District Forest Officer yet.

¹⁰² Peter Branney and Ramu Subedi Interview.

NEPAL CASE STUDY ANNEX A: LIST OF INTERVIEWS

Type of organization	Organization Name	Contacts interviewed & Title
Government	Ministry of Forests and Soil Conservation	Keshav Prasad Khanal, REDD Forestry and Climate Cell: Under Secretary (Tech.)
	Federation of Community Forestry Users	Dr. Dil Raj Khanal, REDD+ Policy Facilitator.
	Ministry of Forests and Soil Conservation	Dr. K.C. Paudel, Joint Secretary (REDD Cell director)
	Department of National Parks and Wildlife Conservation	Krishna Prasad Acharya, Director General
	Ministry of Environment Climate Change Management Division	Batu Krishna Uprety, Joint Secretary (Tech.) Chief.
	Department of Forests and Soil Conservation	Ram Nandan Sah, Undersecretary
Local/Regional Government	Chitwan	Jeeban Thakur, District Forest Officer
Local civil society	Federation of Community Forestry Users	Dr. Dil Raj Khanal, REDD+ Policy Facilitator
	REDD Network, Chitwan Pilot Project.	REDD Network coordinator, secretary of the CFUG, Network Facilitators, Assistant Forest Officer, approximately 12 other community members, including 4 women.
	REDD Network, Gorkha Pilot Project	In attendance: FECOFUN steering committee members, Chairman of the REDD Network, ANSAB technician, Assistant Forest Officer, approximately 15 other community members, including 3 women.
	Forest Action	Dr. Naya Sharma Paudel, Executive Coordinator, Environmental Governance Specialist
International Institutions	International Centre for Integrated Mountain Development (ICIMOD)	Bhaskar Singh Karky, Ph.D., Resource Economist Sustainable Livelihoods
	International Centre for Integrated Mountain Development (ICIMOD)	Laxman Joshi, Ph.D., Payments for Environmental Services Specialist
	International Centre for Integrated Mountain Development (ICIMOD)	Eak Rana, REDD project coordinator
	Nepal Federation of Indigenous Nationalities (NEFIN)	Passang Dolma Sherpa, National Coordinator
Bilateral agencies	USAID Nepal: AID DPA	Netra Sharma Sapkota, Natural Resource Management and Global Climate Change
	USAID Nepal	Dr. Bill Paterson, Director, General Development Office

	Livelihoods & Forestry Programme (A program of Department for International Development)	Peter Branny, Program Advisor
	Livelihoods & Forestry Programme	Ramu Subedi, Deputy Programme Manager
International NGOs	Winrock International	Bibek Chapagain, Director
	Winrock International: Program Associate	Nira Nhatta, Program Associate
	Asia Network for Sustainable Agriculture and Bioresources (ANSAB)	Bishma P. Subedi, Executive Director
	ASNAB	Other ANSAB members

4.0 TANZANIA

4.1 STUDY OVERVIEW

Field Visit: Darryl Vhugen of Landesa and Peter Veit of WRI visited Tanzania from May 16-20, 2001 to gather information for the case study. The study conducted interviews in Dar es Salaam, Zanzibar, Morogoro, Arusha, 3 villages in the Suledo Community Forest area and in a village in the Enduimet Wildlife Management Area in the general vicinity of Arusha.

4.2 BACKGROUND

Approximately 10 percent of Tanzania's land area consisting of 335 million hectares, classified as forestland. About 90 percent of the forestland is miombo woodland found primarily in the southeastern portion of the country. These woodlands contain as many as 300 different species of trees, some of which rise up to 65 feet in height over broadleaf shrubs and grasslands. About 39 percent of the country's important regions in Tanzania include the East Arc Mountains and the central savanna bushland and thickets; savanna grasslands extending to the north and east of Mount Kilimanjaro in the north; large mangrove and coastal forests along the eastern coast; and one of the largest mangrove forests in the world located at the mouth of the Rufiji River in southwestern Tanzania.

FIGURE 4.1: MAP OF TANZANIA AND LOCATIONS VISITED FOR REDD+ INTERVIEWS



Alternative land uses such as agriculture, grazing, settlement, and industrial development have put Tanzania's forests under significant pressure of conversion. About half of the forests due to shifting cultivation. Charcoal production is also a significant cause of deforestation and degradation along with hunting, mining and road construction. The country's rate of deforestation has remained relatively steady in the past 20 years. Between 1990 and 2000, Tanzania lost an average of 412,300 hectares of forest per year.

deforestation rate just less than one percent between 1990 and 2000. This rate has slightly increased per year between 2000 and 2005 (Tanzania National Strategy for Reduced Emissions

Tanzania's forests are extremely important to a large percentage of the population. Charcoal are used by 90 percent of the population for heating and cooking, the forest are the source of 75 percent of construction materials. Forests also provide game meat, nuts, fruit, honey, beeswax, fodder, medicinal plants and other important products. In other countries, Tanzania forests also provide a variety of ecosystem services including watershed functions, biodiversity tourism and carbon sequestration.

4.3 THE LAW

4.3.1 LAND LAWS

In 1995 the Tanzanian government adopted a Land Policy foundation the Land Act and Village Land Act, each of which were enacted in 1999. The Land Policy and these Acts embody a number of important principles, including, among others: (1) recognition of existing rights to land and longstanding use or occupation; (2) the equitable distribution of land by all citizens; (3) encouraging productive and sustainable use of land and equal land rights for women (USAID 2010). Both Acts define land as including the soil, what is underground (excluding minerals and oil) and what naturally grows on land.¹⁰⁴

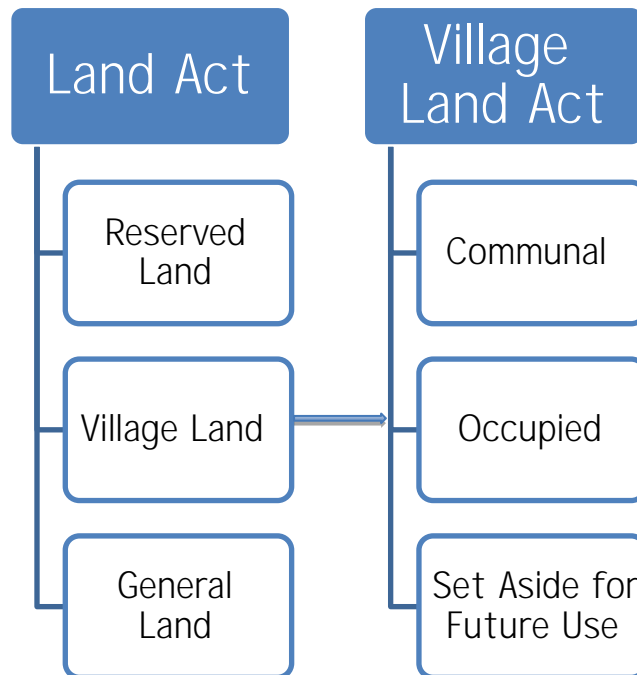
Under the Land Act, all land is controlled by the President who holds it as a trustee for the people. Tanzania is divided into three categories: (1) Reserved Land, including national parks and wildlife reserves; (2) Village Land, including registered Village Land, land that has been created and designated as Village Land by village councils and land that has been occupied and used by villages for more than 11 years under customary law; and (3) General Land, which is all land that is not Reserved Land. Importantly, the Land Act provides that unoccupied or unused Village Land is considered to be General Land.

Under the Village Land Act, adopted in the same year as the Land Act, there are three categories of land: (1) communal land (markets, grazing land, etc.); (2) occupied land, primarily land held by individuals or groups for grazing; and (3) land that has been set aside for future use. Village Land Act, Articles 12 and 13, 1999. Most forests on village land should be either communal land or set aside for future use.

¹⁰³ Zanzibar has different laws that are beyond the scope of this case study.

¹⁰⁴ Land Act, Part I, Section 2, Interpretation. Village Land Act, Article 5. What is defined as land is the earth and the earth below the surface and all substances other than minerals and petroleum forming, or being, or naturally growing on the surface of the earth.

FIGURE 4.2: CATEGORIES OF LAND IN TANZANIA



The Land and Village Land Acts are inconsistent in one very important respect. Under the Land Act, General Land includes unoccupied or unused Village Land. However, under the Village Land Act this unoccupied or unused Village Land is classified as land set aside for future use, making it Village Land. If it is Village Land, it is controlled by the village government. If it is General Land, it falls under the jurisdiction of the Land Commission. This inconsistency has not been clarified by any court cases, so it is not clear what the effect of a dispute over whether a parcel of unoccupied or unused land within a village is Village or General Land.

In addition to this legal inconsistency between laws, there are also threats to village land that come from the Land and Village Land Acts. Under the Land Act, the president may transfer Reserve or General Land to Village Land if doing so serves the public interest. Similarly, the president may transfer Village Land to Reserve or General Land pursuant to the Village Land Act. Those with rights of occupancy are supposed to receive compensation. Under the Land Act, Article 7, 1999; Village Land Act, Part III, Section 8[a], 1999. These powers have been used to convert Village Land to General Land to make it available to investors, sometimes without process or compensation. The Tanzania Investment Commission has established a land bank in order to make land available to REDD+ investors. The Village Land Act does provide some scope for input from village councils on the transfer of Village Land. Generally, the Act provides greater protection for smaller transfers, allowing village councils to disapprove of a transfer under 250 hectares, but no such protection for transfers of land areas over 250 hectares.

The Ministry of Lands and Human Settlement Development is responsible for administering and allocating General and Reserved Land. It acts on behalf of the President in his role as trustee of all land in Tanzania. It is led by a Commissioner of Lands (USAID 2010a).

¹⁰⁵ Interview with Dr. Zahabu, Forest and Beekeeping Division, May 16, 2011. Interview with Andrew Williams, 2011, 22.
¹⁰⁶ Interview of George Jambiya, May 11, 2011. Country Profile at 13.
¹⁰⁷ See the Village Land Act at Part III, Section 6(a).

4.3.2 FOREST LAWS

The Forest Act 2002, essentially governs the use and management of forests in Tanzania. There are four categories of forests in the Act: (1) forest reserves; (2) local authority forest reserves; (3) forests, which include village land forest reserves and community forest reserves; and (4) forests which are not reserved which are on village land (The Forest Act 2002)

The percentage of Tanzania forests found on General Land is disputed. According to the draft National REDD + strategy, about 17 million hectares (about half of the total) General Land (Draft REDD + Strategy 2010). This figure is consistent with figures provided by the Forest and Beekeeping Division (FBD) of Tanzania Ministry of Natural Resources and Tourism. According to FBD, about 54 percent of Tanzania forests are on General Land, 37 are government reserved forests and only 9 percent are private and village forests.

However, according to the Ministry of Lands and Livestock, only 2 percent of the country's land area is Reserve Land and only 2 percent General Land. While conducting a national forest inventory, one surveyor found that there is virtually no General Land in Tanzania. If 2 percent or less of Tanzania land area is General Land, it is impossible for there to be 17 million hectares of forests on General Land. Based on the definition of Village Land in the Village Land Act and existing maps, the Ministry of Lands and local communities, it appears that the vast majority of forests in Tanzania are on Village Land, whether or not formally declared Village Land Forest Reserves (Tanzania Forestry Working Group 2009)

While the amount of forests on General Land is subject to dispute, General Land are the most vulnerable to deforestation and degradation. Cadastre over forest resources, and the responsibility for managing such forests, including issuing concessions, is vested in district governments. Government management is often weak and General Land forests are often treated as an open resource subject to minimal sustainable forest management (USAID 2010)

Participatory Forest Management (PFM) has been part of Tanzania National Forestry Policy for more than 15 years. According to the Tanzania Forestry Working Group (2009), the purpose of PFM is that by clarifying village rights to forest and forest benefits, including the right to benefit from forests in the future in a secure and legal manner, local communities will invest in conserving for their own interest. There are now hundreds of PFM projects throughout Tanzania, although the exact number and amount of land covered is subject to considerable dispute and few projects are fully registered and operational due to capacity constraints.

Two types of PFM projects are in place in Tanzania: (1) joint forest management (JFM) in which a community manages a local government forest reserve pursuant to an agreement with the government; and (2) community forest management (CBFM) where a local community or communities manage forests on Village Land that the local community declares to be Village Land Forest Reserve (VLFR). PFM has had a positive effect on the forests in environmental terms, and has provided more secure and access to forests for communities. With respect to financial gain, communities have had difficulties with securing and enforcing rights to the forest resources and adequate benefit sharing mechanisms, especially with JFM. PFM, therefore, has provided minimal financial gains to the local community (Tanzania Forestry Working Group 2009; REDDNET 2009)

Under a CBFM arrangement, local communities may establish a VLFR by establishing a Village Natural Resource Committee, demarcating the boundaries of the VLFR, conducting a forest inventory, preparing

¹⁰⁸ Tanzania Ministry of Lands and Human Settlement Development. Available online. URL: http://www.ardhi.go.tz/handoverly_services.html (accessed June 2011).

¹⁰⁹ Interview with Prof. Rogers Malimbwi, Forestry and Beekeeping Division, May 16

forest management plan and declaring the VLFR by a village council. Once these steps are completed, the VLFR is a legal entity. The VLFR may be, but need not be, officially registered at the ministerial level (Wildlife Conservation Society of Tanzania 2010).

While the central government owns all biological resources of the Forest, the Village Council or committee representing multiple villages assumes legal control over the use of all forest resources on a VLFR (Forest Act 2002 Wildlife Conservation Society of Tanzania 2010). Thus, by establishing VLFRs, communities obtain full legal rights to manage and benefit from their forests (Wildlife Conservation Society of Tanzania 2010).

4.3.3 WILDLIFE MANAGEMENT AREAS

Wildlife Management Areas (WMAs) are community-based wildlife management areas outside of national parks and other protected areas. WMAs are formed on Village Lands in which local communities receive limited user rights to wildlife and other natural resources pursuant to an approved management plan. Government regulations set forth rules for hunting by which communities share with the government revenues derived from permitted hunting, ecotourist activities within the WMA. Generally speaking, communities are supposed to receive a 65 percent share although there is some question as to whether this occurs in all (Wildlife Conservation Act, Article 7209; Wildlife Conservation Society of Tanzania 2010).

Land placed in a WMA remains Village Land but is managed for agriculture, grazing and settlement within the bounds of the WMA management plan. However, most WMAs are comprised of several villages, representatives of these villages form a management authority, known as the Authorized Association. The Authorized Association is a body that oversees the WMA and manages revenues derived from WMA activities. Thus, the individual villages lose a substantial measure of control over their land because much of their authority is transferred to the Authorized Association.

Importantly, forming a WMA does not provide villages (through the Association) with any additional rights over forest resources on Village Land. The Forest Act governs forest resource use and management (Wildlife Conservation Society of Tanzania 2010). In addition, neither the Forest Act nor the Village Land Act specifically mention WMAs. Under the Village Land Act, Village Councils are empowered to use village land use plans as tools to implement policies for land management including wildlife conservation and potentially the creation and leasing of game farms (Larsen et al., 2000). In practice, this statement appears to include the power to form and participate in the WMA structure; however a legislative amendment making this power explicit would be beneficial.

4.3.4 LAND AND FOREST INSTITUTIONS AND GOVERNANCE

Tanzania's rural areas are the home of more than 100,000 legally constituted Village Councils. The basic managing body is the 25 member Village Council headed by a Village Chairman. Members of the Village Councils are elected by Village Assemblies, which consist of all village residents over the age of 18. One quarter of the members of the council must be women (Wildlife Conservation Society of Tanzania 2010). Under the Village Land and Land Acts the Village Council is responsible for managing Village Land allocation, zoning and boundary decisions are subject to the approval of the Village Assembly. As indicated above, the stipulations for CBFM require that a Village Natural Resource Committee is appointed to oversee a village. WMAs are managed by the Authorized Authority.

¹¹⁰ Interview with members of the Enduimet WMA Authorizing Authority, May 26

¹¹¹ Interview with Carol Sorenson, Coordinator Tanzania Natural Resource Forum, May 25

4.4 TANZANIA'S EMERGING REDD+ STRATEGY

Tanzania participates in the REDD program and the World Bank Forest Carbon Partnership Facility. It is also a beneficiary of Norway's International Climate and Forest Initiative.

The designated authority for all climate-related UNFCCC processes is the Division of Environment (DoE) in the Vice President's Office. The DoE of the Ministry of Natural Resources and Tourism is playing a key role in the development of Tanzania's REDD+ strategy.

A REDD + Task Force was established in 2009, consists of eight members from DoE and the Bank. The Task Force is supported by five technical working groups staffed by representatives of government, civil society and the private sector. One of the working groups focuses on legal and issues, including issues of land tenure, carbon rights and timber. The others work on monitoring and verification, financial mechanisms, agriculture and energy policy.

In December 2010, Tanzania issued its National REDD+ Strategy. While the strategy is still under discussion, it seems likely that its Vision will remain largely unchanged:

Tanzania implements a National REDD+ Strategy that ensures conservation of its unique biodiversity values and forest ecosystems, providing benefits, goods and services are equitably shared by all stakeholders for adaptation, mitigation and adoption of a carbon development pathway under steps as required by the UNFCCC (Tanzania [Draft] National REDD Strategy 2010).

A key objective of objective of the Strategy is to determine how to effectively engage all relevant stakeholders and establish a fair and transparent benefit sharing mechanism that will enable appropriate incentives to be paid to stakeholders within the country (Tanzania [Draft] National REDD Strategy 2010).

Tanzania has just completed phase 1 of development of its strategy, which also included submission of a PP in October 2010. Phase 2, including completion of the strategy is set until 2012.¹¹³

Norway is funding nine pilot carbon projects expected to develop over the next 5 years. Six of these will be designed in order to access the voluntary carbon market, to the extent that they are able to do so, all funds will flow directly to the projects rather than through the government. Only one of the projects have begun yet.

At this point, it appears that the government intends to establish national level REDD+ institutions: (1) National REDD Trust Fund that will receive all REDD+ funds, both from donors and the market; and (2) National Carbon Monitoring Center responsible for monitoring, verification and reporting.¹¹⁴ The draft strategy states that the National REDD Trust Fund will purchase carbon and sell it internationally (Tanzania [Draft] National REDD Strategy 2010). Apparently, this arrangement is due at least in part to minimize transaction costs associated with multiple points of sale and related marketing costs.¹¹⁵

¹¹² Interview with Simon Milledge, Consultant on Environment and Climate Change, Norwegian Embassy, Dar es Salaam, May 2010. REDD+ Strategy at 50.

¹¹³ Interview with Fred Manyika, Department of Environment, Dar es Salaam, May 2010. g X Y b h N g C Z Z] W Y z A U m % ,

¹¹⁴ Id.; Milledge interview; Manyika interview.

¹¹⁵ Zahabu interview.

4.5 REDD + BENEFIT DISTRIBUTION

Tanzania recognizes the importance of adopting a REDD benefit mechanism and formula that provides sufficient financial incentives to those who use and control the forests through their behavior ways that protect the forest (Tanzania Forestry Working Group 2011). If, indeed, the government decides to direct all REDD+ benefits through a single national level institution, it will need to utilize effective benefit sharing mechanisms or create a new one.

In general, the government appears to be contemplating passing a portion of REDD+ revenues to village governments which would then determine how to spend the funds. A decision has been made on whether or not to funnel the funds through district governments or them directly to the Village Councils. If the district government is utilized to direct funds, there will be substantial risks that corruption; lack of capacity and inefficiency at the district level will prevent benefits from actually flowing to the villages.

With respect to existing benefit sharing mechanisms, most attention is focused on the two PFM alternatives (JFM and CBFM) and WMAs. Under CBFM, the payments for permits for forest use are collected directly by the village. In WMAs the wildlife use fees are collected directly by the central government, which then passes a portion of the fees to the WMA. In cases where the Village Councils are authorized to collect a portion of the fees, the WMA funds are not paid directly to individual households.

WMAs have provided at least some benefits to communities, however the funds generated so far in WMAs have been primarily wildlife fees, which are paid first to the government. The government then pays some of the money to the Authorized Association on behalf of the community. This arrangement presents two risks: (1) sharing of revenues between government and WMA may not be equitable; and (2) there may be conflict between the Authorized Association and individual villages over the management and expenditure of WMA revenues. Under the WMA system there is potential for the Authorized Association to directly collect some fees, such as hotel concessions, however approval processes have been slow, and this fee sharing process is not highly developed.

A third potential approach to benefit sharing would be the approach used by the carbon Tanzania pilot project operating in Mbulu District of northern Tanzania. The area is inhabited by the Hadzabe tribe, on land that is set aside and protected for an indigenous community under the Village Land Act. This project is operated by a company called Ecological Initiatives, is selling carbon credits on the voluntary market under the Pan Vivo standard for designing and certifying programs where communities are engaged in providing payments for environmental services (PES). In the future, they will create a larger VLFR under the Forest Act. Revenue from the sale of carbon credits is shared between administrative costs, payments to experts for measuring carbon and \$300 per month to the community. These payments are in addition to tourism revenue that the company receives under a separate arrangement. Thus far, the community is using the funds to pay community members who are patrolling the forests.

4.6 ENTITLEMENT TO RECEIVE REDD+ BENEFITS UNDER TANZANIAN LAW

Tanzania has not adopted carbon rights legislation or other laws explicitly giving with entitlement to receive REDD+ or other carbon benefits widely recognized, including in the draft REDD+ strategy itself. However, there is uncertainty concerning who owns the carbon sequestered in trees in some tenure settings. This issue has been discussed as part of developing the strategy and the

¹¹⁶ Zahabu interview.

¹¹⁷ Interview of Peter Sumbi and Adam Kiduzi, WWF, 20 May 2011, draft REDD+ Strategy at 37; TFWG at 9.

¹¹⁸ See <http://www.planvivo.org/>.

¹¹⁹ See, e.g., draft REDD+ Strategy at 19; Milledge interview.

subject of a new analysis will be the greatest and most important area of uncertainty involves determining whether VLFR forests are on Village or General Land as such areas could involve millions of hectares of forestland.

As explained in some detail above, it appears reasonably certain that local communities own the right forest resources including timber forest products and the carbon sequestered in trees growing on VLFR land.¹²⁰ It seems to be equally clear that the government holds the rights to carbon in forests on General Land or Reserve Land (other than VLFRs).

What is much less clear, however, both in law and practice, is what rights local communities have over resources found on Village Land that has not yet been declared Village Land. The Village Land Act recognizes several categories of land use, including (1) individual settlement, such as for agriculture and housing; (2) communal use, including land use for grazing and harvesting forest products; and (3) aside for future (Village Land Act, Articles 12 and 13, 1999). Forests on village land should fall under one of the latter categories. Thus, these forests should be deemed to be Village Land, whether or not they have been declared to be under a VLFR.

Given this context, it is clear why the inconsistency between the Village Land Act and the Land Act, explained previously, becomes important for VLFR forests on Village Land are considered to be unoccupied or unused under the Land Act. They may be deemed to be on General Land and the right to manage and use the land and forest resources will be owned by the government, not the local community. For non-VLFR forests on Village Land remain Village Land as per the Village Land Act, the land and forest resources, including carbon, should be the property of the village.

Land does not have to be formally surveyed or registered to be considered Village Land under the Village Land Act and Land Act as the laws recognize customary rights of occupancy without such formalities. As a practical matter, however, it appears that government officials do not recognize Village Land that has not been demarcated or for which there is no land use plan, including forested village areas that has not been surveyed and/or is not covered by a land use plan. In large part due to the cost and lack of capacity, local community control over the use of such land is very insecure.

TABLE 4.1: LAND USE RIGHTS AND CARBON OWNERSHIP

Type of Land	Who Owns the Carbon
General Land	Government
Reserve Land (other than VLFRs)	Government
Village Land Forest Reserve	Village
Forests on non-VLFR Village Land	Unclear-village or government

Communities that form CBFM institutions and declared VLFRs would appear to have relatively secure rights to carbon benefits under existing law. Because carbon is not removed or extracted from the forest, such communities would not need a harvesting license under the Forest Act to sell carbon credits or carbon-related payments. Local communities that have not formed VLFRs may be able to successfully assert their rights to carbon in trees on village land.

In sum, under existing law, whether VLFR forestland in a village is considered to be Village Land or General Land is crucially important and is defined in the law to be what naturally grows on the land. For the most part, natural resources (other than minerals and oil and gas), including forest resources

¹²⁰ Milledge interview.

¹²¹ Villages would still need harvesting licenses under the Forest Act.

¹²² Zahabu interview; Malimbwi interview.

on Village Land are owned by the Village. Resources on General Land are owned by the Central Government. If Village forestland that has not been declared a VLFR is deemed to be General Land by central government, the villages will not have a right to receive a benefit from carbon credits or carbon related payments.

4.7. SOCIAL AND ENVIRONMENTAL IMPACTS OF A REDD+ SYSTEM ON FOREST-DEPENDENT COMMUNITIES

For the most part it is too early to try to predict the social and environmental impacts of REDD+ on forest-dependent communities as the REDD+ strategy and mechanisms formed to the extent that and/or WMA mechanisms are for benefits sharing there are risks of corruption and elite capture of benefits, as these are existing problems with some of the institutions.

Even more worrisome are the implications for forest-dependent communities where VLFR forestland is legally deemed to be General Land. This situation will make such land easily available to investors and elites who wish to acquire forestland they believe will generate significant REDD+ benefits, with little or no compensation to the village. Tanzania U N g ` Y I d Y f] Y b W Y s where some communities lost j Y g h their land when Village Land was converted to General Land and given to investors. (REDD-NET 2009)

The potential impact of REDD+ on women is also somewhat uncertain. Tanzanian women have equal rights to land. Discrimination on the basis of sex is prohibited and women are legally entitled to significant representation on Village Councils. In practice, however, women only hold an estimated 20 percent of all land registered in Tanzania. Few women, especially in rural areas, are aware of their rights. They often lack the resources to enforce them. (USAID 2010a) The draft REDD+ Strategy acknowledges the potential harm to gender relations but the team did not find any significant support addressing women and rights issues as part of a REDD+ program.

Pastoral communities in Tanzania already face significant challenges and REDD+ might further marginalize this group. The National Land Policy of 1995 has officially discouraged nomadic herding (USAID 2009). Pastoral communities frequently sell the Village Land Act since land use patterns may not be stable, and their land has not been declared. This situation puts the land on which they rely for livelihoods potentially into the category of unoccupied or unused land and thus their land could easily become available to investors and elites who wish to acquire forestland to generate benefits, leaving pastoralists without their traditional grazing land and without compensation for their loss and with potentially negative effects on food security.

4.8 WILL DISTRIBUTION OF REDD+ BENEFITS INCENTIVIZE THE DESIRED LAND USE BEHAVIOR?

However, REDD+ does not include much detail incentivizing environmentally sound behavior in and around the forest. Deforestation is a big problem in Tanzania. Generally speaking, where PFM has been developed, forests are more sustainably managed compared to other forest areas (USAID 2010). Given this context, efforts to expand and improve PFM should continue.

In areas where forest tenure is reasonably secure, VLFRs as forest-friendly land use may result from the receipt of REDD+ benefit payments to villages that can be used for building schools or clinics if benefits are high enough and the individuals whose behavior change understand that the schools or clinics are a direct result of their efforts. If REDD+ benefits flow first through the central

¹²³ Jambiya interview; Zahidi interview; REDDnet Bulletin.

government, will enough find its way to the local institutions to be sufficiently inclusive in order to ensure that they and their community have benefited from their individual changes in land use behavior?

The bigger risk arises from the dispute over how to determine the amount of forestland on General versus Village Land. The only way to motivate local communities to protect the forests is to ensure that REDD+ revenues for reduced rates of deforestation to community members recognizing that the non-VLFR forests are on Village Land are as crucial as those on General Land so that local community members will be rewarded for protecting the forests (Tanzania Forest Conservation Group 2011).

4.9 SUGGESTED CHANGES IN LAW AND PRACTICE

There are a number of changes in law and practice that Tanzania could consider in connection with its emerging REDD+ program. First, the inconsistencies between the Village Land Act and the Land Act must be resolved. Addressing these inconsistencies can be done in a variety of ways. Perhaps the simplest way is to amend the Land Act to remove the provision stating that unoccupied or unused Village Land is deemed to be General Land. This would make clear that land within the boundaries of a village (whether or not formally demarcated as Village Land, whether or not such land is occupied or unused) is not.

Second, Tanzania should consider amending existing laws to clarify the definition of land in the Village Land Act and Land Act and determine the scope of the rights to use forest resources found on that land under the Forest Act. The definition of land includes what naturally grows on the land, the right to harvest, and would logically include sequestered carbon. The right would be subject only to reasonable existing resource extraction limitations and licensing.

Third, the Ministry of Lands and the FBD should harmonize their maps and land definitions to align with records of the Ministry of Lands. This would clear up much of the confusion over the status of non-VLFR forestland on Village Land. While villages should be encouraged to assist in establishing CBFM institutions and declaring Village Land, villages that do not wish to extract resources from the forests should nevertheless be able to receive benefits for carbon sequestration in the forests that they protect.

Fourth, the government should consider simplifying VLFR requirements for those that do not wish to harvest timber. As VLFR requires demarcation, communities will be better able to access the carbon market if they can clearly show the boundaries of their forest so that accurate carbon calculations can be made. The government could require only a minimal forest management plan from communities that do not intend to extract timber resources.

Fifth, Tanzania should seek opportunities to empower pastoralists and other vulnerable groups and forest communities as part of REDD+ capacity building and implementation. Before REDD+ projects will likely provide benefits to communities and not individual households, the key to improving the status of women in the project areas is to find ways for women to participate more in community decision-making. Strategies should include prioritizing the placement of REDD+ projects in communities that include women in Village Councils or other relevant institutional management bodies. Those providing REDD+ technical assistance to communities should be trained to work with communities to increase the involvement of women. Finally, the REDD Task Force should seek to ensure that organizations representing women have greater participation in Phase 2 of the development REDD+ strategy.

Sixth, Tanzania should base its REDD+ system on its existing PFM program rather than on expanding protected areas that have the potential to displace forest dwellers and undermine PFM livelihoods. Tanzania certainly requires substantial improvement, sustainably managed forests have the potential to

sequester more carbon than protected forests cannot be harvested and can also be more effective in expanding forest cover. Active management of forest areas forestly cover capable of sequestering more carbon than unmanaged or natural forest (Barry et al 2010). Additionally, given the reality of weak governance and protection for protected areas in Tanzania, PFM schemes offer a better hope of actually obtaining increased forest growth and carbon sequestration. Most importantly, community forestry is also more consistent with protecting existing community rights to forest lands and decision making (Barry et al 2010).

Finally, local communities need to become far more aware of the potential for REDD+ and what it could mean in terms of responsibilities and benefits. For people to participate in village government and decision making is often lacking in transparency and accountability. If REDD+ is going to benefit both forests and people, the people need to understand it and be more involved in deciding whether and how to participate and how to invest the benefits that result. A significant educational and capacity building campaign initiated.

¹²⁴ Zahabu interview.

TANZANIA CASE STUDY ANNEX A: LIST OF INTERVIEWS

Type of organization	Organization name	Contacts interviewed & Title
Government	Vice-President Office (VPO)	- Kanizio F. and Fred K. Manyika, Senior Environmental Officer and Chair of REDD Task Force
	Forestry and Beekeeping Division	- Dr. Zahabu, FBD
Local government	Jozani National Park, Zanzibar	- Salim Ali Khamis, Park Warden
	Kiteto District	- Jane Mutagurwa, District Executive Director - Fabian N. Nshuima, District Land, Natural Resources and Environmental Officer - Mr. Muhimili, District Forest Officer
	Zonal Environmental Committee (ZEC) and Sunya Village (part of SULEDO)	- ZEC Chairman - ZEC Secretary - 12 ZEC members
	Enduimet WMA	- 11 members of the AA including the Secretary, Treasurer, Administrator, Guard
Village government	Lengatei Village (part of SULEDO)	- 14 members of the Natural Resource Committee, including the Chairman and Secretary as well as the Acting Village Executive Officer
	Lesoti Village (part of SULEDO)	- 10 members Also present in the meeting in Lesoti Village - Dr. Kelly Askew, University of Michigan - 2-man film crew - Prof. Maganga, Institute of Resource Assessment (IRA), University of Dar es Salaam - Lydia Nyeme, PhD student of Prof Maganga
Universities and research institutions	University of Dar es Salaam	- Dr. George Jambiya - Zabron Kengera, PhD Student
	Sokoine University of Agriculture, Morogoro	- Prof. George Kajembe - Prof. Salem Moyondo - Kikuwanza - Usamba Sal
	University of Maryland	- Emmanuel Sulle
	Round Table Africa	- Laura Tarimo, WMA researcher
	Conservation Resource Center	- One person
Local civil society / coalition of NGOs	MJUMITA (Tanzanian Community Forest Conservation Network)	- Theron M. Brown, Technical Advisor
	Tanzania Forest Conservation Group (TFCG)	- Nike Doggart, Senior Technical Advisor
	@ U k m Y f g N ' 9 b j] f d Team (LEAT)	- Prof. Hamudi Majamba, Faculty of Law, University of Dar es Salaam - Rugemeleza Nshala - Lutema
	Hakiardhi	- Cathbert Tomitho, Programme Officer
	Tanzania Natural Resource Forum (TNRf)	- Elias, Chairman - Carol Sorenson, Director - (One other person)
International Institutions	Food and Agricultural Organization (FAO)	- Prof. Rogers E. Malimbwi, Forest Inventory with FBD
	IUCN-East Africa	- Andrew Williams
Bilateral agencies/embassies	Norwegian Embassy	- Simon Milledge, Consultant, Environment/Climate Change

	USAID	<ul style="list-style-type: none"> - Mikala Lauridsen, Senior Technical Advisor, Consultant - Gabriel Batulaine, Senior Environmental Management Specialist
International NGOs	CARE/Tanzania	<ul style="list-style-type: none"> - Paul Baker, Director, CARE, 16 May, Monday - George Mkoma, CARE, micro-finance coordinator
	CARE/Zanzibar	<ul style="list-style-type: none"> - Raja Jarrah, CARE Climate Change Advisor and REDD point person - Amour B. Omar, Program Coordinator/Team leader-Zanzibar - Soud Mohammed Jumah, Monitoring and Evaluation and Learning Officer, HIMA - Fatima Ali Khamis, Community Forests and Institutional Strengthening Officer, HIMA - Ali M. Hilal, Leakage Control and Enterprises Development Officer, HIMA
	WWF	<ul style="list-style-type: none"> - Dr. Mwakalila, REDD - Peter Sumbi, Forest Programme Officer - Adam Kiduzi, Forest Programme Officer - Dr. H. Sosovele, CBNRM Policy Program Coordinator
	African Wildlife Foundation (AWF)	<ul style="list-style-type: none"> - Andrea Athanas, Senior Program Design Officer - Thadeus Binamungu, Senior Program Officer
	Honey Guide Foundation	<ul style="list-style-type: none"> - Damian Bell
Experts	Independent Consultant	<ul style="list-style-type: none"> - Prof. Adolfo Mascarenhas
Private firms	Manyara Ranch	<ul style="list-style-type: none"> - Clive Jones, former manager
	Ecological Initiatives (Carbon Tanzania)	<ul style="list-style-type: none"> - Mark Baker

5.0 MOZAMBIQUE

5.1 STUDY OVERVIEW

Field visit: Darryl Vhugen of Landesa visited Mozambique from May 2011 to June 2011 to gather information for the case study. Interviews were conducted with government officials, project developers, project participants, representatives of NGOs and donors in Maputo, Chimio, Nhambita and Gorongosa National Park. A list of interviews is attached as Annex A.

5.2 BACKGROUND

Mozambique contains approximately 40 million hectares of forest, approximately 50% of which is miombo woodland. About two-thirds of the forestland is miombo woodland, found primarily in the central and northern parts of the country. These woodlands contain as many as 300 different species of trees, many of which rise up to 65 feet in height over broad grasslands. There are also significant mopane woodlands consisting of single stem mopane shrubs and trees up to 15 meters in height as well as large grassy forests located along the coast (Wiersma & Kounnikoff et al. 2011; Ntantumbo & Izidin 2009).

FIGURE 5.1: MAP OF MOZAMBIQUE AND LOCATIONS VISITED FOR REDD+ INTERVIEWS



Between 1990 and 2005, Mozambique had an annual deforestation rate of 0.5%. The major drivers of deforestation are shifting agriculture, fuelwood consumption, agricultural clearing for mining activities. The miombo woodlands suffer the highest rate of deforestation, especially in areas close to roads. Forest degradation is caused mostly by illegal logging. While fire plays an important role in forest regeneration, frequent and intensive bushfire, mostly to clear land for agricultural production, is a major problem in Mozambique. Such fires burn large areas of forest. The largest carbon emissions in Mozambique are from land use change and forestry (Wiersma & Kounnikoff et al. 2011; Ntantumbo & Izidin 2009).

et al 2009; interview of Taquarie) observer estimated that 70 percent of Mozambique's surface area burns every year although another estimate puts the figure at 40% nationwide (USAID 2010b).

Protected areas cover 10 percent of the country. These areas include national parks and hunting areas (Nhancale et al 2009). Prominent protected areas include the Reservas in northern Mozambique along the Tanzania border and the Gorongosa National Park in central Mozambique. Protected areas include human settlements. Some of these communities are participating in management arrangements with NGOs or private developers, mostly in connection with attracting tourists to view or hunt animals (De Wit & Norfolk 2010).

Most Mozambicans live in rural areas where they depend on forest resources for their livelihoods. Mozambique's forest sector is composed of both formal forest enterprises and informal or subsistence use. Forest uses in both sectors include the production of timber products, forest products (NTFPs) and the provision of forest services such as ecotourism, biodiversity conservation and carbon sequestration. Enterprises in the formal forest sector are primarily engaged in timber production although there are some producing NTFPs and others focused on ecotourism and carbon sequestration operations. Informal enterprises are involved primarily in small timber and NTFP operations (Nhancale et al 2009).

5.3 THE LAW

5.3.1 LAND LAWS

Under Mozambique's 2004 Constitution the state owns all land. As Mozambicans are entitled to use and enjoy the land although they may not mortgage the land. In the context of state ownership, the 1997 Land Law permits individuals, communities and entities to obtain perpetual land use rights known as a DUAT (*Usos de uso e aproveitamento*). DUATs may be obtained through (a) traditional and good faith land occupancy; (b) proof of occupancy for 10 years; and (c) a renewable grant from the state. The first two categories of DUAT, available to individuals or communities, provide perpetual use rights and do not require delimitation or registration. DUATs are issued by the National Directorate of Land and Forests (DNLF) of the Ministry of Agriculture, responsible for land administration in Mozambique.

FIGURE 5.2: TYPES OF DUATS

Traditional and Good Faith Occupancy	Proof of 10-year Occupancy	Renewable 50-year
<ul style="list-style-type: none"> • Available to individuals and communities • Provide perpetual use rights • Delimitation and registration not required 	<ul style="list-style-type: none"> • Available to individuals and communities • Provide perpetual use rights • Delimitation and registration not required 	<ul style="list-style-type: none"> • Intended for investors • Mandatory consultation/agreement with community (but often does not occur)

An important objective of the Land Law is to support the land rights of communities, women and smallholder farmers while also encouraging investment in perpetual use rights based on

¹²⁵ Interview with Mikael Rein, Community Based Natural Resource Management Expert for Mozambique, Mozambique Ministry of Agriculture National Directorate of Lands and Forests, May 30

traditional occupancy, it explicitly recognizes the rights of communities to their traditional territories.

Community DUATs give communal use rights to land additionally occupied by the community. Individual members of the community can obtain individual DUATs for customary land by the community. Women and men have equal rights to hold land.

An investor must prepare a approved land exploitation plan in order to obtain a DUAT. The application process includes mandatory consultation with the community and its members. In theory, the community has the right to veto the proposed development and thus prevent issuance of the DUAT. In reality, however, the consultation requirement has often not been enforced and communities appear to have meaningful recourse in those circumstances. Instances where consultations have taken place they have tended to be rather cursory and hampered by community lack of knowledge and need savvy and minimal participation by women and marginalized members of the community. (USAID 2010b)

The law does not require delimitation and registration of land rights obtained by occupancy. Only a small number of communities, probably less than 10 percent, have undertaken the rather complex and expensive process, despite the fact that it would strengthen their ability to prevent their land from being allocated to third parties. The size of the land areas that has been registered ranges from less than 10 hectares to as much as 500,000 hectares, but overall covers less than 1 percent of the national territory. The larger parcels tend to be in forested areas. (Des Wit & Norfolk 2010) Documenting their rights in this manner makes it more likely that the land will be recognized as occupied, thus invoking the mandatory requirements of consultation by proposed investors. (USAID 2011b)

Efforts to increase community land delimitation and registration have been mixed successes. It has never been a high priority for the government so such efforts have been largely driven by NGOs and community members and many NGOs have only limited capacity to engage in the implementation process. There are reports that the government has been delimiting only the areas used by communities for subsistence purposes, thus excluding other areas, including forests. (Des Wit & Norfolk 2010; interview of Chris Tanner.)

The Land Law is generally interpreted as giving the land rights holder the right to use the land and its resources on the land for subsistence or commercial purposes, subject to restrictions on the extraction of resources found in the forest. This interpretation stems from the law's treatment of customary rights as formal legal rights and from the requirement that investors obtain the consent of the community or individual rights holder to engage in activities on the land. (Des Wit & Norfolk 2010)

5.3.2 FOREST LAWS

All forestland and forest resources belong to the state. Generally, local communities can use forest resources for subsistence needs without obtaining a license. All other uses of forest resources require the user to obtain a license from the government. (Government of Mozambique Forestry Law, 1999)

The Forestry Law establishes three categories of forestland: (1) Forests sometimes called protected reserves located in protection zones such as national parks and zones of historical and cultural use of value; (2) Productive Forests, which are areas with high timber value and usually made available for timber concessions; and (3) Multiple Use Forests, less productive open-access forests in which most of the people live and on which they depend for subsistence. (Government of Mozambique Forestry Law, 1999; Nhamitso & Izidi 2009)

¹²⁶ Salomao interview; interview of Sean Nazerali, WWF Mozambique, Quirimbas Supergroup, May 31

TABLE 5.1: FOREST CATEGORIES IN MOZAMBIQUE¹²⁷

Province	Productive : c f Y g h - fl 2007)	Conservation : c f Y g h - fl 2007)	No. of Forest Concessions (2008)	No. of Simple License Holders (2008)
Maputo	683,000	138,000	0	9
Gaza	2,422,000	1,357,000	3	66
Inhambane	1,437,000	982,000	12	77
Sofala	1,419,000	1,886,000	27	121
Manica	1,951,000	1,505,000	10	46
Tete	3,340,000	882,000	6	54
Zambezia	4,113,000	951,000	43	98
Nampula	2,317,000	455,000	18	61
Cabo Delgado	3,176,000	1,628,000	31	65
Niassa	6,050,000	3,379,000	6	19
TOTAL	26,908,000	13,163,000	156	616

Protected areas are defined and regulated by the Forestry and Wildlife laws in Mozambique. In protected areas and use resources associated for subsistence purposes the law it is not clear whether these settlements and resource uses are illegal or interpreted as allowing them (De Wit & Norfolk 2010; interview with Tanner)

Other than community subsistence, exploitation of forest resources requires formally using local communities and individuals to obtain either a simple license or forest concession. Concession is defined as the extraction of forest products in the 2002 Regulations on the Law Forestry and Wildlife

Simple licenses, good for one year, may be obtained by domestic companies or local communities wanting to extract relatively small quantities of specified forest resources for commercial purposes. Because the process for acquiring a simple license is relatively easy and inexpensive, it is the preferred license for small Mozambican businesses. Many others choose to operate informally (Nhanh et al. 2009; USAID 2010b)

Forest concession contracts are issued for 50 years for large scale timber and/or forest product (NTFP) production. The process is far more expensive and complex than is involved in obtaining a simple license. While individuals and communities are eligible for forest concession contracts, too large companies with the capacity to work areas of 100,000 hectares are preferred (Nhanh et al. 2009; USAID 2010b)

¹²⁷Derived from Table 2 in De Wit & Norfolk 2010. Reliable figures for the amount of Multiple Use Forests in Mozambique could not be obtained.

Consistent with the Land Law, companies seeking to exploit forest resources on community land are required to consult with the communities as a condition of obtaining either a simple license or a forest concession contract. The simple license process clearly requires the applicant to obtain the consent of the land rights holder, which, under the Land Law, is the local community (Regulations on the Law on Forestry and Wildlife, 2002). However, while requiring consultation, the law does not explicitly require local community consent to forest concessions. Thus, it is not clear whether communities have the right to decline the larger investment contracts. In fact, practically speaking, communities are unable to say no to an investor that wants to acquire the rights to forest resources and has effectively obtained government approval.

In sum, forest resource use rights of individuals and local communities in Mozambique are limited to subsistence use. The state recognizes no other customary or inherent rights to the resources, in contrast to the Land Law treatment of land use (Dimitis & Norfolk, 2010).

5.4 MOZAMBIQUE'S EMERGING REDD+ STRATEGY

Mozambique participates in the World Bank Carbon Partnership Facility. It also receives support from Brazil under an arrangement called REDD: A Brazilian Initiative, with technical assistance from Norway (Kanounnikoff et al., 2011).

Mozambique has yet to complete its REDD+ strategy. The government submitted a Business Plan Idea Note (R-PIN) in 2008. The country prepared a draft strategy before the Business Preparation Proposal (R-PP). On the advice of the World Bank, the strategy will slow while it is drafted. The government plans to expand its efforts to consult with local communities. As a result, Mozambique now aims to complete and adopt its REDD+ strategy by August 2012.

There are two functioning REDD+ projects in Mozambique, both operated by Envirotrade and discussed in the next section. In addition, the Society for the Management of Niassa Reserve and Fauna and Flora International are in the advanced stages of preparing a project in the Niassa National Reserve.¹²⁸ Moreover, WWF is exploring possible REDD+ projects in the Niassa National Park and in the mangrove forests of the Zambezi Delta. Green Resources, Inc. is developing a project in Niassa Province.¹²⁹

Mozambique has not determined how it will define or assign carbon rights. Its draft strategy includes the following objectives:

- < Approve an instrument that makes explicit the property for environmental services, particularly carbon rights.
- < Strengthen the right of land use and environmental services for rural communities (Draft National REDD+ Strategy)

¹²⁸ Regulations on the k... c b... c f Y g h f m... U b X... K... X... Z Y Z... 5 f h] W... Y g... & * f l Y E... f Y e i] f Y g... c W U... c d] b] c b l... c Z... h... Y... U d d...] W U h] c b"... 5 f h] W... Y... * f l... E... g h U h Y o n s e... U n... Y e i] f Y X... W c... W c a a i b] h m... a Y a V Y f g... d f Y g Y b h A... I... 5 f U h] l W... Y Y U... f... b... [c... Z... c... f... h... V... Y... b... Y... c... f... c... h... g... l... u... f... h... m... c... U... k...] f... h... Y... e... i... h... V... F...] \... h... g... 7... c... a... d... U... f... U... h...] j... Y... 5... b... U... m... g... Y... g... c... Z... G... l... 8... Y... j... Y... c... d] b... [... 7... c... i... b... h... f...] Y... g... l... U... h... ,... +... "... H...

¹²⁹ Interview of Aldo Salomao

¹³⁰ See http://www.forestcarbonpartnership.org/fcp/sites/forestship.org/files/Documents/PDF/Mozambique_RPIN_Revised_Feb_2009.pdf.

¹³¹ Alima Issufo Taquidir interview.

¹³² Interview with Madya Couto, Society for the Management of Niassa Reserve, June 1

¹³³ Nazerali interview.

¹³⁴ Details can be found at <http://www.greenresources.no/Portals/O/Carbon/Sanga.pdf>.

Despite these stated objectives, observers believe that the Mozambique government will do its best to keep forestland out of the hands of local communities. However, as discussed more fully below, the government wishes to achieve the objectives set forth in the draft REDD+ strategy, it should take steps to harmonize the relevant provisions of the Land Law and Wildlife Law so as to make clear that those with use rights under the law are entitled to receive benefits from forest products on their land, subject to reasonable restrictions on the extraction of products.

5.5 REDD+ BENEFIT DISTRIBUTION

Similarly, Mozambique has not settled on its REDD+ sharing mechanism. Some observers believe Mozambique will adopt a PES system aimed at slowing shifting cultivation practices which result in annual burning of a huge amount of Mozambique (Wertz-Kanounnikoff et al. 2011), while others stress that the mechanism that will be used has not yet been determined.

Whichever benefit sharing mechanism is adopted, a number of interviewees stated that REDD+ benefits likely to flow first through an undefined national system probably will not be strictly performance-based since benefits will likely be shared in some way with communities that do not have forests on their lands but are located near other communities that do. The research is concerned that if all benefits directed to forest communities excluded non-forest communities could create conflicts. This approach reflects a desire to provide incentives to those communities undermine efforts by their neighbors to protect nearby forests.

The percentage of REDD+ revenues to be allocated to local communities has not been determined. The draft REDD+ strategy states that communities should receive REDD+ benefits. According to an unconfirmed report, the government, international NGOs and VGO stakeholders have been discussing the allocation of 60 percent of REDD+ benefits to communities.

5.5.1 TWENTY PERCENT REVENUE SHARING MODEL

Mozambique may model its system on its (the *Regulations on the Law on Forests and Wildlife*) which distributes 20 percent of timber taxes and royalties collected from park entry fees, hunting fees and forest concessions on timber harvested from community lands. This program has been implemented slowly as communities have difficulty to participate in part because they must form a new institution and obtain a bank account (Wertz-Kanounnikoff et al. 2011). The central government collects the revenues and then pays a portion to the provincial governments which are supposed to make payments to local communities. Many communities are still owed substantial money under the program (Wertz-Kanounnikoff et al. 2011; De Wit & Norford 2010).

For those communities that have received payments, questions concerning the expenditure of those funds. In some cases, funds have not been invested well because communities lack knowledge and experience in managing cash-based projects. There are reports of funds being misappropriated by local elites (Wertz-Kanounnikoff et al. 2011; Rein interview).

¹³⁵ Tanner interview.

¹³⁶ Interview with Duncan McQueen, IIED, May 129

¹³⁷ E.g., Rein interview, Alima Issufo Taquidir interview

¹³⁸ Interview with Paula Panguene, Deputy Director for Environment, Ministry for the Coordination of Environmental Affairs, Government of Mozambique, June 16

¹³⁹ Interview of Dr. Sheila Wertz-Kanounnikoff, Senior Associate, Forests and Governance Program, CBOR, June 1

¹⁴⁰ Interview with Robert Layng, Ecotourism and Biodiversity Manager and Mission Environment Officer, USAID Mozambique, May 31

¹⁴¹ Taquidir interview.

¹⁴² Layng interview.

Another significant difficulty arises in making payments to communities for timber harvested from community land that has not been demarcated. The problem with if Mozambique attempts to distribute REDD+ benefits linked to specific amounts of carbon sequestered in community lands will be essential to clearly demarcate the boundaries of those lands.

5.5.2 NHAMBITA

Another potential model for Mozambique or, perhaps more likely, one component of a benefit sharing model, is the one utilized in the Nhambita Community Carbon Project. This project has made payments to about 3,000 individual households and 20 communities that have taken actions resulting in measurable added carbon sequestration on their land either through planting trees or protecting forests on large community lands under the Plan Vivo standards. Designing and certifying programs where communities are engaged in providing payments for environmental services (PES);¹⁴³ the Nhambita project, together with its more recently established sister project in the Zambezi Delta, appear to be the only REDD projects in Mozambique that are providing tangible benefits to participants both in the form of carbon payments and sustainable farming practices.

In the Nhambita project, Envirotrade helped communities to delimit and register their land. This company relied on the communities to verify the boundaries of plots held by individuals and to receive seedlings and technical assistance on how to improve the productivity of their farmland while reducing emissions and increasing stored carbon. A farmer who complies with an agreed land use plan receives a share of revenue paid to Envirotrade for sale of carbon offsets based on the predicted amount of carbon to be stored on the farmer's plot over a 99 year period. Approximately 30 percent of the individual contractors are women, both married and single, although there are no women serving on the Nhambita Association. The company must engage in monitoring to determine the amount of additional carbon stored on each plot.

Revenues are supposed to be divided evenly between the land rights holder (either community or individual farmer), Envirotrade, and Envirotrade. However, in the case of individual farmers (as opposed to larger, community forests) revenues have not been sufficient to cover marketing costs so the farmer has received a share to date.

Even though benefits are accruing to the beneficiary households, Envirotrade has determined that it is simply too expensive to administer more than 3,000 contracts with individual smallholder companies. As a result, the company has decided to limit its future contracts to communities with at least 100,000 hectares of forestland. This experience may lead the government to shun a system requiring payments to individual or small community rights holders due to the high transaction costs that such a mechanism will entail.

5.6 CARBON RIGHTS UNDER MOZAMBIQUE LAW

Mozambique's Draft National REDD + Strategy calls for an instrument to determine rights to carbon. This declaration is important because current law does not implicitly establish those rights or otherwise determine who has a right to receive REDD+ benefits. Inconsistencies in existing law with respect to the right to use forest resources make such an instrument or changes to current law essential.

¹⁴³See <http://www.planvivo.org/>.

¹⁴⁴ Interview of Alastair MacCrimmon, Sofala Project Manager, Envirotrade, June 13, 2011. See, also the project summary and annual reports available on <http://www.planvivo.org/projects/registeredprojects/communitycarbonmozambique/>

¹⁴⁵ MacCrimmon interview.

¹⁴⁶ MacCrimmon interview.

¹⁴⁷ MacCrimmon interview.

The most important inconsistency is between the Land Law and the Forestry Law and regulations. As explained above, the Land Law appears to give communities rights to natural resources on their land, but forest law restrictions prevent the extraction of forest products. The Forestry Law, however, states that forest products remain the property of the state. The state relinquish any right to use these products to anyone, except for subsistence use by local community members, unless a user obtains a simple forest concession contract (Dewitt & Norfolk 2010; Kitala 2008).

Exploitation is defined as the extraction of forest products. This definition would seem to exclude carbon as there is no extraction by any reasonable definition of the word. However, this statement suggests that the person holding rights to land with forests on it would not need a license or contract to receive carbon benefits as preserving or enhancing stored tree carbon cannot reasonably be considered extraction of a forest product. If the Land Law prevails, local communities probably have the right to benefit from stored carbon. However, the fact that the forest laws are generally interpreted to preclude communities from receiving any commercial benefit from forest resources suggests that local communities may not have a legal right to receive such (Dewitt & Norfolk 2010).

Even if the law is interpreted as giving the carbon right to communities, those rights may be lost by a community's practical inability to derail forest concessions. If the government interprets stored carbon as a forest product, an interpretation that would be inconsistent with the definition of the term, investors may well seek concession contracts for huge swathes of forest in order to reap REDD+ benefits.

In sum, the Land Law suggests that holders of land use rights own the right to benefit from carbon stored on the land. The Forestry Law and regulations suggest otherwise. This inconsistency must be resolved.

5.7 SOCIAL AND ENVIRONMENTAL IMPACTS

As in the other study countries, it is too soon to predict the social and environmental impacts of REDD+ on forest communities because the REDD+ strategy-sharing mechanism have yet to be determined. If the mechanism includes a component similar to the Nhambita model, local communities and individuals could reap real benefits. In Nhambita, individual farmers have realized significant benefits in the form of cash payments, livelihood assistance and increased agricultural productivity. The challenge will be to find a way to reduce transaction costs so that it is feasible to share benefits directly with smallholders. The community has received payments from carbon credit revenues linked to carbon stored on community forestland. The Nhambita community association has invested the funds to construct two schools, thus presumably benefiting the community as a whole.

If the mechanism incorporates the 20 percent forest revenue sharing system, problems of local institutional capacity, corruption and elite capture must be addressed. In addition, many of the community associations are not representative of the community. For example, women are frequently not allowed to participate, contrary to legal requirements.

By law, Mozambican women have equal rights. As a practical matter, however, customary law and traditional practices result in few women having secure rights to land. Moreover, women rarely play a meaningful role in local governance bodies, although women are far more influential at the national government level. The Draft National REDD+ Strategy has little to say about the REDD+ on women.

¹⁴⁸ MacCrimmon interview; interview with Nhambita village farmer/contractor, June 3 2011.

¹⁴⁹ Interview with members of the Nhambita community association, June 3 2011.

¹⁵⁰ Salomao interview.

¹⁵¹ Panguene interview; Salomao interview.

5.8 SUGGESTED CHANGES IN LAW AND PRACTICE

If Mozambique decides to apply existing law to determine the holder of carbon rights, the best way local communities is to anchor such rights to the Land Law, possibly to do this by amending applicable provisions of the Forestry Law and regulations to make clear that land rights holders own the to benefit from forest products on their land where the receipt of such benefits do not require the of such products. A new carbon rights law could achieve the same objective.

In addition, if communities are to receive benefits tied to their carbon sequestration performance, it is important to improve the quality and accelerate the pace of community land delimitations with particular emphasis on community land with large forests. Presently, the government has a goal of 50 community delimitations per year. Increasing this number should be a high priority for the government in order to improve implementation of the Land Law, facilitate REDD+ revenue sharing process and to more effectively administer the revenue sharing mechanism under the Forestry Regulations. As many have observed, local communities and local governments often lack the capacity to engage in the process of delimitation and registration. Donors and the government alike should consider whether REDD+ readiness funds should be used to support community land delimitation.

Communities also need to improve their ability to negotiate with prospecting investors rights to conduct commercial activities on community land. REDD+ developers such as Envirotrade of Mozambique ties the right to receive REDD+ benefits to land use rights, communities may well find themselves engaging in negotiations that want to retain land use rights in order to pursue REDD+ benefits. Communities will need substantial assistance to reach the point where they can effectively participate in such negotiations.

If Mozambique wants its REDD+ system to succeed, it must use that system in a way that incentivizes individuals and communities to stop burning their land. The model under which communities receive 20 percent of revenues is unlikely to help achieve that goal, unless communities receive a far higher percentage share and find it easier to receive payments.

Moreover, in light of the difficulties it has faced in implementing the 20 percent forest and wildlife revenue sharing program, the government of Mozambique should give serious consideration to using a different benefit-sharing mechanism than the 20 percent system. This mechanism is too complex and makes it too difficult for communities to receive payments (Mearns & Izidine 2009). Some version of the Nhambita model should be considered, although payments at the individual household level may involve unsustainable transaction costs. The transaction cost problem possibly could be addressed by assigning local communities the responsibility for managing contracts with households.

The potential impact on women of REDD+ implementation has yet to be addressed in any significant way. By law, women have equal rights to land and resources in Mozambique. However, access to land and security of tenure is largely determined by traditional practices and customs. The result is that women rarely have land titled in their name and often have little input in making decisions. Sometimes women are able to participate in the community institutions established to invest the funds received under the 20 percent revenue sharing program. If these institutions are used in the REDD+ benefit-sharing mechanism, then this could be an opportunity to encourage further participation by women.

¹⁵² McQueen interview.

¹⁵³ Tanner interview.

¹⁵⁴ Tanner interview.

¹⁵⁵ Salomao interview.

¹⁵⁶ Interview with Oystein Botillen, First Secretary, Royal Norwegian Embassy, Maputo.

¹⁵⁷ Salomao interview.

MOZAMBIQUE CASE STUDY ANNEX A : LIST OF INTERVIEWS

Type of organization	Organization Name	Contacts interviewed & Title
Government	Mozambique Ministry of Agriculture, National Directorate of Lands and Forests	Mikal Rein, Community Based Natural Resource Management Expert for Mozambique
	Mozambique Ministry of Agriculture, National Directorate of Lands and Forests	Alima Issufo Taquidir, Head of Department
	Ministry for the Coordination of Environmental Affairs, Government of Mozambique	Paula Panguene, Deputy Director for Environment Management
Village Government	Nhambita Community Association	Several members
Local civil society	Society for the Management of Niassa Reserve	Madya Couto
	Iniciativa para Terras Comunitarias (ITC)	Joaquim Langa, Sergio Ye, Jose Monteiro
	Director General, Centro Terra Viva	Alda Salomao
	Centro Terra Viva	Carlos Serra
International Institutions	Food and Agriculture Organization of the UN (FAO)	Chris Tanner, Senior Technical Advisor on Land and Natural Resources Legislation
	Gorongosa Restoration Project	Marty Sampson, Technical Advisor, Jessica Greenston, Legal Counsel
Bilateral agencies	USAID Mozambique	Robert Layng, Tourism and Biodiversity Manager and Mission Environment Officer
	Royal Norwegian Embassy, Maputo	Oystein Botillen, First Secretary
International NGOs	IIED	Duncan McQueen
	IIED	Dr. Sheila Wertz-Kanounnikof, Senior Associate, Forests and Governance Program
	WWF Mozambique	Sean Nazerali, Quirimbas Support
Private firms	Envirotrade	Antonio Serra, Country Manager
	Envirotrade	Alastair MacCrimmon, Sofala Project Manager
	Envirotrade	Aristides Muhate, Country Carbon Inventory Manager

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